

Running head: Eating Irregularities at UPEI

The Prevalence of Eating Irregularities at UPEI and the Awareness, Availability and
Accessibility of Treatment Options on the “Gentle Island”

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CERTIFICATION

I certify that this thesis has not been submitted for any higher degree to any other
University or Institute

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The Prevalence of Eating Irregularities at UPEI and the Awareness, Availability and
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Abstract

Despite the increased prevalence of eating disorders in recent years, research into these illnesses is largely underfunded and incomplete (House of Commons, 2014; Public Health Agency of Canada, 2002). Within the current literature, however, we can see that there is a significantly elevated rate of prevalence of eating disorders among university students (Eisenberg, Nicklett, Roeder, & Kirz, 2011). As well, while treatment options are limited across Canada, they are especially minimal in the maritime region, where very few dedicated specialists currently practice. Given this information, how do university students in PEI navigate these limited options if they find themselves needing help for eating issues? Are they aware of the services that currently exist, and if so, have they utilized them? The current study aims to estimate the incidence of disordered eating within a volunteer sample of UPEI students, and explore their level of awareness of local health services that accept individuals with eating issues. Finally, we also aim to examine the perspectives of individuals who have accessed these services and their unique accounts of those experiences.

The Prevalence of Eating Irregularities at UPEI and the Awareness, Availability and
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“The annual death rate associated with anorexia is more than 12 times higher than the annual death rate due to all other causes combined for females between 15 and 24 years old.”

(Sullivan, 1995)

Eating disorders have become ubiquitous in Western society. Research indicates that the prevalence of these illnesses continues to increase throughout North America (Health Canada, 2002; Linville, Brown, & O’Neil, 2012; White, Reynolds-Malear, & Cordero, 2011; Zhao & Yafu, 2006). A report by the Agency for Healthcare Research and Quality found that eating disorder-related hospitalizations in the United States increased by 18% between 1999 and 2006 (Zhao & Yafu, 2006), while in Canada, a report released in 2014 by the Canadian Institute for Health Information reported a staggering 42% increase in hospitalizations in a two year period for girls between 10-19 years of age (Canadian Institute for Health Information [CIHI], 2014). Despite these dramatic increases, research on eating disorders is largely underfunded when compared to other mental illnesses, and the data is therefore limited in both its scope and breadth (House of Commons, 2014; Public Health Agency of Canada, 2002). Due in part to the limitations of existing research, statistical data on eating disorders in Canada and the United States often varies between studies and research institutions (Bunnell, Shenker, Nussbaum, Jacobson, & Cooper, 1990; Hoyt & Ross, 2003). Further complicating the lack of research funding and consistency between studies is the fact that experts acknowledge data collection on eating disorders in Canada as insufficient and out of date (House of Commons, 2014). Data on

prevalence rates, information on at-risk populations such as university students and individuals of low socioeconomic status, and implementation of evidence-based treatments are sorely lacking in Canada. This information is integral in order to inform healthcare policy decisions in Canada, as well as best practice guidelines for clinicians, and without it, those who suffer from eating disorders are made to feel like second class citizens within our healthcare system (House of Commons, 2014).

Despite their increased prevalence, dangerous effects on physical health, high mortality rates, and unusually high rates of relapse, it seems that eating disorders are not considered a priority in Canada's current health system. Another unfortunate byproduct of this is the general lack of awareness about these illnesses in the general public as well as healthcare professionals (Kaplan & Garfinkel, 1999). Treatment options are often limited, and in the search for effective care sufferers often face extensive wait times and negative attitudes from service providers (Antoniou & Cooper, 2013). One population that is particularly at-risk is college and university students (Wilfley, Agras, & Taylor, 2013; Quick & Byrd-Bredbenner, 2013). This demographic has significantly elevated eating disorder prevalence rates, as well as a lower likelihood of receiving treatment as a result of the structure of the academic year and the disconnect in services for students attending university away from home (Arcelus & Button, 2007; Becker et al., 2010). Compounding these problematic issues is the fact that research on eating disorders in this population is relatively limited, and there is a lot that is not yet understood. This, however, only mirrors the state of eating disorder research in general, in that it is, in its current state, unclear and incomplete. Despite the confusion, however, one thing remains clear: eating disorders are increasingly problematic mental illnesses, which require increased efforts in research, awareness, and treatment options.

The purpose of this study is threefold: 1) to estimate the prevalence of eating issues among UPEI students, 2) to determine their level of awareness about local services which provide support for eating disorders, and 3) where relevant, to examine their experiences with accessing these services for themselves or others.

What are Eating Disorders?

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (5th ed.; American Psychiatric Association, 2013), eating disorders (EDs) are characterized by a “persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning”. They typically develop between mid-adolescence and early adulthood, although a small proportion of sufferers do develop mid-life eating disorders (Arcelus & Button, 2007; Vohs, Heatherton, & Herrin, 2001). The DSM-5 included significant changes to eating disorder types and diagnostic criteria. Past editions of the DSM have included only anorexia nervosa and bulimia nervosa as clinical EDs, with an additional broad category referred to as “eating disorder not otherwise specified” (EDNOS) that served as a catch-all for patients with subclinical anorexia and bulimia, as well as those with binge eating disorder. The DSM-5, however, includes binge eating disorder as a clinical ED, and has replaced EDNOS with “other specified feeding or eating disorder” (OSFED).

In recent years, EDNOS had become the most frequently diagnosed ED due to the volume of patients who did not quite fit the strict diagnostic criteria for anorexia or bulimia, which raised concerns about the validity of the existing diagnostic criteria and categories. By relaxing the criteria for bulimia and anorexia and including binge eating disorder as its own category, OSFED will account for a more balanced percentage of ED diagnoses than did

EDNOS because more individuals with EDs now meet the diagnostic criteria for a clinical ED (Mancuso et al., 2015).

Anorexia nervosa (AN) is characterized by body image distortion and an intense fear of gaining weight, which leads to severe dietary restriction and “significantly low weight in relation to age, sex, developmental stage and physical health” (American Psychiatric Association, 2013). Individuals with AN have disturbances in the way they experience their body weight and shape, and are often unaware of the extent to which they are underweight or malnourished. Bulimia nervosa (BN) experience recurrent episodes of binge eating, characterized by the sense of having no control over eating, followed by the use of compensatory purging behaviors to prevent weight gain (American Psychiatric Association, 2013). The term “purging” can include behaviors such as self-induced vomiting, laxative and/or diuretic use, and excessive exercise. This binge/purge cycle occurs at least once per week, on average, and is often accompanied by feelings of intense guilt or shame.

Binge eating disorder (BED) is characterized by recurrent episodes of consuming excessive amounts of food in a short time frame, without compensatory behavior, and is “accompanied by feelings of embarrassment, self-disgust, loss of control, and distress” (House of Commons, 2014). This disorder is commonly associated with obesity. Finally, other specified feeding and eating disorder (OSFED) is a diagnostic category for individuals who present with “feeding or eating behaviors that cause clinically significant distress and impairment” in areas of daily functioning, but do not meet the full diagnostic criteria for any other eating disorders (American Psychiatric Association, 2013). For example, a patient who presents with atypical anorexia, in which their weight is in or above the normal range despite all other diagnostic criteria for AN being met, would fall into the OSFED category.

Prevalence

Over the years, many studies have examined prevalence rates for eating disorders, with quite a variety of outcomes. For example, one longitudinal study reported a lifetime prevalence rate for any eating disorder of 5.7% for females and 1.2% for males (Smink, Van Hoeken, Oldehinkel, & Hoek, 2014), while a population study in the United States found that by young adulthood, much higher rates of between 11-30% subjects suffered from an eating disorder by young adulthood (Steinhausen, 2008). Another study from the United States looked at EDs in college women and reported that up to 61% experience subclinical ED issues (Mintz & Betz, 1988). However, Canadian statistics report a lifetime prevalence of about 3-4% for eating disorders in general (Public Health Agency of Canada, 2002). While the majority of ED sufferers are female, research indicates that the incidence of these illnesses in males has increased, with Canadian men and boys currently representing approximately 20% of eating disordered individuals (White, Reynolds-Malear, & Cordero, 2011; House of Commons, 2014).

Prevalence statistics should not be taken at face value, however, as they often only represent cases where medical intervention was accessed, and therefore the actual incidence of EDs is likely to be higher. Hospitalization data are the most accessible forms of prevalence information, but the fact that this accounts only for the most extreme cases of EDs is problematic. According to the 2014 report of the Standing Committee on the Status of Women, when it comes to Canadian children with EDs, “the actual incidence was estimated to be two to four times higher than what is reported in the literature” (House of Commons, 2014). Accentuating this point is a recent finding that in Canada, eating disorders are now the third most common chronic illness in youth, behind asthma and obesity (Lafrance, Lafrance-Robinson, & Boachie, 2013; Girz, Lafrance-Robinson, & Tessier, 2014). Despite this alarming statistic, the

Canadian Institute for Health Information (CIHI) receive ED data from only 8 Canadian jurisdictions, and receive no data on community-based ED services (House of Commons, 2014). Further confounding the issue of prevalence is the fact that eating disorders are plagued by societal stigma and blame, which can result in under-reporting of illness, as well as delayed help-seeking behaviors (Kaplan & Garfinkel, 1999). As a result, it is challenging for researchers to get accurate statistics on prevalence when it comes to eating disorders.

Etiology

Another challenging area in eating disorders research is etiology. Today, EDs are widely acknowledged as complex illnesses with a variety of biopsychosocial contributing factors at play (Public Health Agency of Canada, 2002). The vast majority of studies emphasize the multifactorial origin of EDs, with an interplay of biological, psychological, developmental, and genetic factors that can manifest differently in each individual patient (Steinhausen, 2002). Some studies now cite more significant genetic influences in the development of EDs, with the heritability of anorexia in particular reported at up to 75% (House of Commons, 2014). Genetic risk factors in EDs are best described as a delicate balance between genetic predisposition and environmental factors, or a “diathesis-stress” model. Some individuals possess a higher genetic risk of developing an ED, which lays dormant within their genetic code. Many of these people will never develop an ED; however, some will experience significant life events or stressors that will trigger this underlying risk factor, thereby activating the onset of the ED’s development. In other words, “genetics loads the gun; environment pulls the trigger” (House of commons, 2014). As well, psychological risk factors such as anxious and obsessional traits, perfectionism, and low self-esteem are often present, and developmental factors like experiences with trauma can also play a role (Peck & Lightsey, 2008). The Western cultural ideals of thinness for the female body

are often involved in the etiological discourse surrounding EDs, though many refer to this as more of a trigger than a causal factor (House of commons, 2014).

Physical & Psychological Implications and Mortality

EDs are a complex form of mental illness; not only do they significantly impair individuals' psychological and cognitive functioning, they also lead to potentially serious physical health issues. Cardiac abnormalities, electrolyte imbalance, osteoporosis, dental issues, seizures and infertility are just a few examples of physical complications that can result from EDs (Academy for Eating Disorders [AED], 2012; Kaplan & Garfinkel, 1999; Public Health Agency of Canada, 2002). EDs also have a significant psychological impact on sufferers, often negatively impacting their day-to-day functioning. In a UK study examining quality of life in individuals with a history of EDs, it was found that those with an ED suffered significantly impaired quality of life when compared with their non-eating disordered counterparts, in terms of physical, emotional, and psychological health (Doll, Petersen, & Stewart-Brown, 2004). This is not surprising when you consider some of the effects of EDs on sufferers' thoughts, behaviors, and relationships. Individuals with EDs tend to isolate themselves by withdrawing from social situations and relationships; they are often depressed and/or anxious; experience obsessive thoughts, and a sense of shame or secrecy (House of Commons, 2014). In fact, ED patients reportedly experience significantly higher levels of self-directed hostility, shame, and self-criticism than other diagnostic groups (Goss & Allan, 2014). In a statement for the Report of the Standing Committee on the Status of Women about eating disorders, one ED expert described the anguish of living with an ED as ““relentless pain, self-loathing, isolation, sadness, hunger, disgust, and self-contempt” (House of Commons, 2014). The extensive psychological distress

that sufferers experience, in combination with physical health effects, seems to explain their reduced quality of life.

Due, in part, to the frequency of medical complications, eating disorders have alarmingly high mortality rates: between 5-20% (Health state descriptions, 2012). The mortality rate in anorexia nervosa, for example, is estimated to be 10-15%, which is the highest mortality rate of all psychiatric illnesses (House of Commons, 2014; Steinhausen, 2002). Further illustrating the complexity of these disorders, the high mortality rate is not attributed to physical complications alone: up to a third of deaths in patients with anorexia are due to suicide (AED, 2012; Steinhausen, 2002). In other words, the annual rate of suicide for individuals with anorexia is more than 200 times greater than the suicide rate in the general population, and attempts occur in approximately 20-30% of subjects (Statistics Canada, 2012; Sullivan, 1995). It is not surprising, then, to learn that EDs have high rates of psychiatric comorbidities, including depression, anxiety disorders, obsessive-compulsive disorder, and substance abuse, which can exacerbate ED symptoms and interfere with treatment (Eisenberg, Nicklett, Roeder, & Kirz, 2011; Kaplan & Garfinkel, 1999). Unfortunately, some evidence shows that these comorbidities contribute to negative ED prognosis and outcomes, though more research needs to be conducted in this domain (Kaplan & Garfinkel, 1999; Steinhausen, 2002).

Relapse & Recovery

In line with their high mortality rates, eating disorders have lower than optimal recovery rates and relatively high rates of relapse. As with rates of prevalence, statistics on the long-term course and outcome of EDs are not always consistent, due to methodological discrepancies, issues with defining what a “full recovery” looks like, as well as high attrition rates in longitudinal studies (Pike, 1998). However, most researchers agree that whatever the outcome,

recovery from an eating disorder is not a short process; it typically takes patients between 2 and 7 years (Curran, Walker, & Schmidt, 2009; House of Commons, 2014). In general, individuals with EDs fall into one of potential outcome categories: between 45-50% achieve a full recovery, 30-35% show some improvement or a partial recovery, and 20% develop a chronic course of the ED (Steinhausen, 2008; Pike, 1998). However, as Dr. Kathleen Pike (1998) described in her review of the literature in ED outcomes, these statistics lack specificity in important areas. For example, the majority of patients who achieve either full or partial recovery “continue to be symptomatic in ways that affect their overall functioning” such as in their psychosocial adjustment and general eating behaviors and attitudes (Pike, 1998).

Recovery rates in anorexia are particularly concerning. In another review of ED outcome literature, Kaplan and Garfinkel (1999) found that more than 30% of individuals with anorexia remained chronically ill after a 10-year follow-up, and were often unresponsive to treatment. Further complicating this issue is the fact that the relapse rate in EDs is approximately 35%, indicating that for more than a third of the recovered individuals, recovery is not always stable (Statistics Canada, 2012). While both bulimia and anorexia have high rates of relapse, there are subtle differences in the course and outcomes of each illness. Having conducted a longitudinal study on outcomes of both EDs, Herzog et al. (1999) summarized this trend in the following statement: “The findings suggest that the course of anorexia is characterized by high rates of partial recovery and low rates of full recovery, while the course of bulimia is characterized by higher rates of both partial and full recovery” (p.829). For individuals with anorexia, research suggests that a full recovery is more likely if the age of onset for the disorder was in adolescence, and if the duration of the illness before beginning treatment was relatively short (Steinhausen,

2008). In other words, early intervention may play an essential role in successful recovery from anorexia.

While the statistics on eating disorder relapse and recovery are disheartening, they are not altogether surprising considering what we know about how EDs operate. Once fully developed, ED behaviors and symptoms become highly self-reinforcing. Bingeing, purging, and caloric restriction can function as “psychological anesthetics to bind negative affects and remove them from conscious awareness” (Kaplan & Garfinkel, 1999). In other words, ED behaviors allow sufferers to numb themselves emotionally, thereby relieving them of what would otherwise have been overwhelmingly intense experiences and emotions. A person with anorexia and comorbid anxiety disorder might derive relief from their typical state of hyper vigilance through starving themselves. A patient with binge eating disorder may experience similar feelings of relief through the act of bingeing. These behaviors give sufferers the illusion of having effective coping mechanisms, which can have the unfortunate effect of strengthening their disordered beliefs and behaviors. It is no surprise, then, that EDs have low recovery and high mortality rates; their symptoms can be almost comforting to those affected. It does illustrate, however, the significant complexity of these illnesses, and the importance of continued research into more effective treatment methods.

EDs in University Students

Although general ED prevalence statistics are varied, studies consistently show that EDs are especially common in college and university students (Doll, Petersen, & Stewart-Brown, 2004; Quick & Byrd-Bredbenner, 2013; Wilfley, Agras, & Taylor, 2013). While there is consensus about the elevated ED risk in university students, specific prevalence rates often vary from study to study. This is due in part to discrepancies in the way eating disorders are

operationally defined within each respective study. Some seek to identify the rate of ED behavior that meets full diagnostic criteria within a university sample, while others are interested in disordered eating behaviors in general, and therefore would include less severe EDs such as EDNOS and subclinical disorders. In studies that look at ED prevalence through the lens of diagnostic criteria and clinical EDs, most report a prevalence rate of between 8-17% in the university student population, though some report rates of up to 25% (Eisenberg, Nicklett, Roeder, & Kirz, 2011; Marciano, McSherry, & Kraus, 1988; Prouty, Protinski, & Canady, 2002). A study by Quick and Byrd-Bredbenner (2013) that looked more broadly at disordered eating behavior found that one third of college students regularly used disordered compensatory behaviors in order to control their weight/shape.

Many studies looking at EDs in college-aged samples are now focusing on EDNOS (now OSFED) and subclinical eating disorders. In taking that small step back to include more ED-related criteria, prevalence rates skyrocket. One such study by Mintz and Betz (1988) found that only 33% of university women could be categorized as “normal eaters”, and 82% of their participants reportedly engaging in one or more dieting behaviors on a daily basis. EDNOS, or OSFED as it is now called in the DSM-5, appears to be the most common ED in the university student population. For example, a longitudinal study by White et al. (2011) found that the significant increase in ED behavior in their sample over a period of 13 years was attributed almost entirely to the increased EDNOS diagnoses in the host university.

There are several working theories that seek to explain the elevated risk for university students developing an eating disorder. Some researchers have found support for the idea that the stress of this transitional life stage of leaving home and beginning life as an adult can act as a trigger for an underlying genetic predisposition to develop an ED (Arcelus & Button, 2007;

Quick & Byrd-Bredbenner, 2013). If stress is thought to be the trigger then university life in general could play in to the development of ED symptoms, as students often experience pressure and stress with academic workload, finances, and employment (Arcelus & Button, 2007). It should be noted, however, that research that focuses on adolescents often finds that disordered eating attitudes and behaviors are developed before the college years, whereas studies focusing on the university population often hypothesize that the elevated severity of EDs during college is a result of the life transition triggering the disorders (Vohs, Heatherton, & Herrin, 2001). It is also possible, then, that some individuals experience subclinical eating issues during adolescence that are exacerbated by the stressful transition to college and adulthood, and then develop into full-blown eating disorders. Whatever the cause or trigger, it is clear that EDs are highly prevalent and problematic issues in university and college students.

Unfortunately, despite the elevated prevalence and risk factors within this population, research indicates that only a small percentage of college students with clinical and subclinical EDs receive treatment (Becker et al., 2010). One study by Eisenberg et al. (2011) found that only 15% of the students with positive ED screens had received counseling or therapy, and less than 10% had been formally diagnosed. When students do seek and receive treatment for eating issues, they can experience unique barriers to effective care. For example, students attending university away from home may experience discontinuities in care between the services in their home province and the province in which they attend university (Arcelus & Button, 2007). The structure of the academic calendar can impact treatment provision for students as well. Often, mental health and specialized ED services have waiting lists, and students may receive an offer to begin their treatment just before they head home for a holiday or summer break. Additionally, a family-based treatment method often referred to as the Maudsley Method is one of the only

treatments with consistent success rates with anorexia specifically, but is rarely an option for students attending university away from their families of origin (Arcelus & Button, 2007).

The combination of abnormally high ED prevalence and low treatment seeking and receiving among university students highlights the importance of future research into how EDs are identified, assessed, and treated in this high-risk population. EDs have significant implications for affected university students, often negatively impacting not only their physical and mental health, but their academic performance as well. A study at Queen's University in Kingston, Ontario found that the attrition rate in students with positive ED screens and/or self-reported ED diagnoses was 9.2%, while the overall attrition rate was just 3.3% (Marciano, McSherry, & Kraus, 1988). This is a significant difference, which, as the authors note, “conjures up images of students whose abnormal eating attitudes were of such clinical significance that withdrawal from university was necessary” (Marciano, McSherry, & Kraus, 1988). EDs have also been shown to have detrimental effects on emotional wellbeing, particularly in the domain of social functioning; individuals with EDs reportedly engage in more social isolation (Doll, Petersen, & Stewart-Brown, 2004). These effects are just a few examples of the ways in which EDs negatively impact the lives of university and college students. More research, prevention, and treatment options are needed in this domain in order to lower prevalence rates and improve outcomes within the university population.

Subclinical Disordered Eating and the Eating Disorders Continuum

A particularly contentious issue in research on EDs in university students is the topic of subclinical EDs, or as some experts conceptualize it: the eating disorders continuum. While a clear definition of what constitutes subclinical disordered eating has yet to be established, many researchers are exploring the notion of subclinical EDs, as well as an eating disorders continuum,

as alternative conceptualizations to the more rigid diagnostic categories in previous editions of the DSM (Bunnell, Shenker, Nussbaum, Jacobson, & Cooper, 1989; Hoyt & Ross, 2003; Peck & Lightsey, 2008). The continuum model of EDs proposes that rather than using strict diagnostic criteria for a few specified ED categories, we use a continuum that looks at ED behaviors and attitudes as more of a spectrum, from no ED behavior to severe ED behavior (Peck & Lightsey, 2008). There is considerable overlap between the concept of an eating disorders continuum and subclinical or subthreshold eating disorders, given that a subthreshold eating disorder would fall just below a clinical eating disorder on the proposed eating disorders continuum. Therefore, for the purposes of this study, we will use these terms interchangeably.

Definitions of subclinical eating disorders vary slightly from study to study, but the overall conceptualization of these issues is fairly consistent. As with OSFED, in subclinical EDs some but not all of the diagnostic criteria for a clinical ED such as anorexia are met, but the behaviors are clinically significant in that they cannot be considered normal dieting (Marciano, McSherry, & Kraus, 1988). For example, an individual who engages in binge/purge cycles with less frequency than is described in the DSM-5 under bulimia would be classified as subthreshold. Other clinically significant behaviors that are often present in subclinical EDs include periodic laxative use, over-exercising as a weight control method, obsessive eating behaviors such as cutting food into tiny pieces, chewing and spitting, and over-monitoring of calorie and fat content, to name a few (Hoyt & Ross, 2003).

Studies show that subclinical eating pathology is a widespread issue among university students in particular (Eisenberg et al., 2011). One study that examined ED prevalence on college campuses found that of the 67% of students who had positive ED screens, the majority would likely be diagnosed as OSFED (previously EDNOS), which is a prime example of a

subclinical diagnosis (Eisenberg et al., 2011). Other researchers have reported OSFED/EDNOS as the most common EDs among university females, with increased rates of these subclinical concerns within this population in recent years (Hoyt & Ross, 2003; White, Reynolds-Malear, & Cordero, 2011).

Despite the possible implications of the terms “subthreshold” and “subclinical”, findings indicate that these EDs have considerable overlap with clinical EDs. In comparison studies examining the different features of EDs in clinical and subclinical diagnoses, individuals with subclinical anorexia regularly exhibit the same levels of psychological distress as those with clinically diagnosed anorexia (Aspen et al., 2014; Bunnell et al., 1990; Hoyt & Ross, 2003). One such study by Bunnell et al. (1990) reported that while patients with subclinical anorexia differed with respect to physical effects, such as less emaciation, their levels of body image dissatisfaction, drive for thinness, depressive symptomology, perfectionism, and emotional numbing were comparable to the clinical patients. A similar study by Aspen et al. (2014) found that patients with OSFED and those with clinical EDs did not show significant differences with respect to comorbid mood, anxiety, and substance abuse disorders. The authors posited that these findings show strong support for the idea that individuals with subclinical EDs are “just as impaired as those with clinical EDs” (Aspen et al., 2014). In addition, this lack of discrepancy between clinical and subclinical cases in terms of psychological features suggests that these features are core features of the illness, rather than a product of the physical effects of the ED (Bunnell et al., 1990). In fact, in a study by Hoyt and Ross (2003), only 2 of the 72 participants with positive ED screens also had underweight BMIs. This lends further support to the importance of considering the psychological components of EDs, since the physical effects and manifestations are much less uniform across clinical populations.

Indeed, it seems that individuals with subclinical EDs exhibit a great deal of functional impairment, which calls into question their classification as subthreshold, or partial-syndrome. These terms seem to imply a milder version of the ED symptomatology and side effects, which stands in stark contrast to the literature on these EDs and therefore paints an inaccurate picture of the experiences of those with subclinical EDs. These individuals are still at considerable physical risk as a result of their disordered eating behaviors, as well as experiencing significant psychological distress and reduced quality of life and daily functioning. These similarities with clinical EDs have led researchers to investigate the outcomes of subclinical EDs, with disheartening results. In a review of the literature, Shisslak, Crago, and Estes (1995) reported that up to 46% of women with subthreshold EDs did progress to full-blown, clinical EDs within one year. This highlights the importance of treating subclinical EDs as serious mental health conditions, and providing timely intervention and preventative care in order to circumvent eventual full-syndrome EDs in these individuals.

Challenges of ED Diagnosis and Treatment

Eating disorders have long been acknowledged in the medical and mental health professions as notoriously difficult to treat. Their complex etiology involves an interplay between biological, psychological, social, developmental, and environmental elements and the combination of these factors may be different on a case-by-case basis (Kaplan & Garfinkel, 1999). They are unique in that they have significant physical health effects as well as mental health, which can complicate treatment options depending on the severity of these physical health issues. As well, high rates of psychological comorbidities in individuals with EDs can increase the severity of the ED itself, and result in a need to decide whether to treat multiple conditions simultaneously, or to prioritize one over the others (Aspen et al., 2014). In previous

sections we have discussed these broader challenges, but there are other elements in the treatment of these illnesses that must be addressed in order to get a comprehensive look at the realities of EDs in Canada. While the intricacies of the disorders themselves contribute to these difficulties in treatment, there are also several external factors at play.

Stigma

Stigmatizing attitudes toward mental illness have long been an issue in North America. However, recent research has shed light on the differing types and levels of mental health stigma depending on the disorder in question (Bannatyne & Abel, 2015; Griffiths, Mond, Murray, & Touyz, 2015). While eating disorders have been found to invoke less fear-related stigma than other mental illnesses, they often trigger blame (Stewart, Keel, & Schiavo, 2006). Anorexia, for example, is often laden with the more traditional stigma involving shame, stereotypes and discrimination, as well as another layer of stigma involving trivialization of the disorder in framing it as a behavior choice rather than a serious illness (Bannatyne & Abel, 2015). The latter is often referred to as “volitional” stigma, in which individuals with EDs are made to feel that they are to blame for their illness; and the more controllable others perceive the condition to be, the more blame the individual experiences (Bannatyne & Abel, 2015).

Stigma and negative attitudes towards individuals with EDs are often a result of stereotypes, myths, and general lack of awareness and understanding about these conditions. For example, a common stereotype about those with EDs is that they are attention-seeking and/or vain, which then becomes one of many themes in the array of stigmatizing attitudes about EDs (Griffiths et al., 2015). One population-based study by Bannatyne and Abel (2015) explored beliefs and attitudes that lead to volitional stigma and EDs. In one section of their survey, almost 40% of respondents said that they felt individuals with EDs “could pull themselves together if

they wanted to” (Bannatyne & Abel, 2015). In terms of specific ED diagnoses, individuals with bulimia are often stigmatized as lacking self-control, whereas those with anorexia experience a higher degree of volitional stigma (Griffiths et al., 2015). Given that binge eating disorder are often overweight, they may experience the same “lack of self-control” stigma as we see with bulimia, as well as negative attitudes from others about their weight. Finally, men with EDs experience an additional layer of stigma in that they report being made to feel they were less of a man, as EDs affect mainly females. This variety of negative attitudes is demonstrative of how stigma seems to originate as assumptions or beliefs that often make sweeping generalizations about eating disorders and those who suffer from them.

Unfortunately, there is increasing evidence to suggest that negative and stigmatizing attitudes about EDs are also prevalent in the healthcare sector (Antoniou & Cooper, 2013; Bannatyne & Abel, 2015; Griffiths et al., 2015; Kaplan & Garfinkel, 1999). Anorexia and bulimia in particular have been shown to evoke intense negative feelings in health professionals, moreso than any other psychiatric illness (Kaplan & Garfinkel, 1999). For example, Bannatyne and Abel (2015) found that within their sample of medical and nursing staff, 60% of respondents endorsed statements of personal responsibility in the development and maintenance of EDs, and rated ED patients as less likable than those with other illnesses. A similar study reported that physicians’ highly pessimistic attitudes about the outcome of EDs contributed to their stigmatizing attitudes (Currin, Waller, & Schmidt, 2009). Kaplan and Garfinkel (1999) examined healthcare provider stigma even further and found that those with less ED-specific experience reported more negative attitudes and reactions toward patients with EDs than did clinicians with more ED experience. It is not surprising, then, to learn that the healthcare providers who appear to hold the fewest stigmatizing attitudes about EDs are mental health professionals, with one

study having reported less than 10% of these clinicians endorsing volitional stigma statements (Griffiths et al., 2015). However, given that the majority of individuals with EDs are first seen by a primary care physician rather than a mental health professional, their likelihood of encountering stigma in a clinical setting is troubling (Linville et al., 2012).

Research indicates that these negative attitudes can have serious consequences for the ED sufferer on the receiving end of the stigma. One study that examined the prevalence and correlates of ED-specific stigma found that more frequent experiences of stigma were consistently associated with “more marked eating disorder symptoms, a longer duration of illness, lower self-esteem, and more self-stigma of seeking psychological help” (Griffiths et al., 2015). Volitional stigma in particular was described by sufferers as a frequent experience, and found to be highly damaging (Griffiths et al., 2015). An especially concerning consequence of ED stigma is that in addition to prolonging recovery and increasing odds of relapse in some sufferers, it may be a significant barrier to seeking treatment in the first place (Bannatyne & Abel, 2015; Evans et al., 2011; Stewart et al., 2006). For instance, Bannatyne and Abel concluded that negative attitudes from healthcare professionals “are likely to cause significant distress to sufferers, contributing to the low treatment rates of anorexia nervosa” (Bannatyne & Abel, 2015). Given the severity of the physical and psychological effects of EDs, their high mortality rates, and what we know about the importance of early intervention and treatment, this barrier constitutes a significant public health issue (Antoniou & Cooper, 2013; Stewart et al., 2006).

In general, the prevalence of ED stigma within the medical community and the general public suggests a need for more public education and awareness about EDs and their origins. Research into stigma reduction has shown that the lack of public awareness about the biological

and genetic etiological factors in EDs may contribute to blame-based stigma that sufferers often encounter (Bannatyne & Abel, 2015). In a preliminary study by Crisafulli et al. (2008) where participants read vignettes describing various causes in ED development, the group presented with a biogenetic explanation for EDs displayed significantly less vanity and blame-based stigma than groups with sociocultural explanations. Currently, the predominant belief about causality in EDs leans heavily on sociocultural factors and very little on biogenetic explanations, which is demonstrative of a widespread stereotype when it comes to the public understanding of EDs (Bannatyne et al., 2015; Crisafulli et al., 2008; Griffiths et al., 2015). In light of this, it would be beneficial to develop new strategies for public awareness and dissemination of information about the biogenetic factors in EDs, given that this information has the potential to begin the process of de-stigmatizing these illnesses (Crisafulli et al., 2008).

Specialist vs. non-specialist care

The fact that clinicians with ED experience hold less stigmatizing attitudes raises an important question: what is the difference between specialist care and non-specialist care when it comes to eating disorders? Is treatment via non-specialist clinicians, such as family physicians or mental health professionals with minimal ED training, as effective as treatment from an ED specialist? Keeping in mind that this question is complex and requires consideration of multiple factors, the research suggests that broadly, the answer is no. In the DSM-5, the American Psychiatric Association ([APA], 2013) acknowledges that, given the complexity and severity of EDs, effective treatment requires expertise as well as a specialized and comprehensive knowledge of the illnesses. This issue of specialized care for EDs has been the focus of multiple studies, the overwhelming majority of which report that clinicians with specific training and

education in EDs provide more effective treatment (House et al., 2012; Linville et al., 2012; Robinson et al., 2013; Williams & Leichner, 2006).

There are many factors that may contribute to the enhanced efficacy of treatment from specialized services. One study in the UK found that specialized services are more effective in both the assessment and treatment of EDs in adolescents (House et al., 2012). With respect to assessment, twice as many patients with EDs were identified in geographical areas that had specialized services compared to areas with just non-specialist services. Additionally, when patients began treatment in a non-specialist setting, they were 2.5 times as likely to be admitted as an inpatient within the first 12 months of treatment. Not only is there no evidence to support the efficacy of inpatient admissions for EDs, there is actually some evidence to suggest that it may negatively impact ED outcomes, especially in younger patients (House et al., 2012). Despite the fact that inpatient care is costly and has high rates of relapse, ED hospitalizations for females under the age of 15 in Canada have increased by 34% since 1987 (Public Health Agency of Canada, 2002). This is just one example of the impact of clinicians developing treatment plans that are contradictory to current evidence-based methods. Also known as empirically supported treatments (ESTs), evidence based treatment methods are ones that have demonstrated efficacy throughout controlled research trials (Von Ranson, Wallace, & Stevenson, 2013). Use of ESTs positively correlated with specialized training and education, as well as clinical experience with EDs. Unfortunately, research indicates that ESTs are underused in Canada, especially in non-specialized community clinicians treating ED clients (Von Ranson et al., 2013). Possible contributors to this lack of EST use include lack of ED-specific content in training programs, limited opportunities for clinicians to advance their skills in ED care, and lack of research into current best practice methods, among others. In a study by Von Ranson et al. (2013) that

described the underuse of ESTs for EDs in Canada, it was found that many of the clinicians who reported use of alternative methods had received very little training on ED treatment in the first place. However, regardless of the reasons behind this lack of evidence-based ED treatment, it highlights the importance of disseminating information on ESTs to all levels of clinicians seeing ED patients, especially non-specialists.

It is important to note that despite the fact that specialized care is the most effective option in ED treatment, most individuals with ED symptoms are seen first by a primary care physician (Linville et al., 2012). Reasons for this may vary: some individuals may be there for routine appointments; others experience the physical effects of an ED and therefore seek medical attention before psychological services, and still others need to see a physician in order to obtain a referral to more specialized ED services. Unfortunately, there is overwhelming evidence to suggest that education about the identification, assessment, and treatment of EDs in medical schools is sorely lacking (Currin et al., 2009; Girz et al., 2014; Lafrance-Robinson et al., 2013; Linville et al., 2012; Williams & Leichner, 2006). In one study by Girz et al. (2014) involving medical residents, 70% reported having received less than 5 hours of training on EDs in children and adolescents.

Not surprisingly, physicians are not pleased about this lack of education. In a survey of family physicians in Canada, 75% of family doctors described their undergraduate training in ED management as poor, and 59% were equally dissatisfied with their postgraduate training (Lafrance-Robinson et al., 2013). As well, a study by Williams and Leichner (2006) revealed that only 6% of medical residents felt that they had adequate clinical experiences with EDs. Unfortunately, not much progress has been made in this area in recent years. In a study of two medical resident cohorts, one in 1990 and another in 2004, the cohorts reported almost identical

levels of satisfaction with ED training, indicating that the ED education provided has remained largely the same (Williams & Leichner, 2006). Their frustration with their lack of ED training is understandable, given that evidence suggests that it leads to situations in which they are unable to provide adequate care to patients (Lafrance-Robinson et al., 2013; Linville et al., 2012). In a study by Linville et al. (2012), 77% of medical provider respondents reported having patients with EDs that they were unable to treat, citing a lack of skill in this area. A similar study by Lafrance-Robinson et al. (2013) that surveyed physicians and psychologists in Ontario found that more than 90% of the sample described having been unable to treat a child or adolescent patient with an ED. In line with research on specialists, non-ED psychologists and physicians were found to have a much lower self-assessed ability to manage ED patients than were ED-psychologists (Lafrance-Robinson et al., 2013).

What is perhaps most unfortunate about this situation is the impact it has on the state of ED treatment in Canada, and, by extension, on ED sufferers. The lack of training, understanding and knowledge among the very professionals who are often the first point of contact for individuals with EDs can have detrimental effects on their health and wellbeing. First of all, some research indicates that only a minority of physicians recognize ED diagnostic symptoms and physical complications (Currin et al., 2009). This can translate into doctors not recognizing EDs in their patients until they're deeply entrenched disorders, or even missing cases entirely. A disheartening example of this is the current estimation that bulimia nervosa is only recognized and diagnosed in 1 out of 10 patients suffering from the illness (Currin et al., 2009). Given that early intervention is highly correlated with positive ED outcomes, a lack of recognition and diagnosis of that magnitude is alarming.

In addition to recognition and diagnosis, lack of specialized knowledge about EDs also affects treatment decisions. In their assessment of ED-specific knowledge among medical residents, Girz et al. (2014), medical residents were asked 5 true or false questions about the treatment of EDs. Disturbingly, 85% of residents answered correctly on just 2 or fewer questions. As the authors described, some of the inaccurate beliefs about treatment that these residents reported would, in practice, directly interfere with current evidence-based treatment protocols (Girz et al., 2014). As well, Currin et al. (2009) found that more knowledge and experience with EDs results in greater likelihood of referring patients to appropriate specialist services and providing follow-up care, both of which align with current best-practice guidelines. Given this, we can speculate that more training and education during medical school may prevent uninformed and potentially harmful treatment provision in the future.

As we can see, there is a growing body of evidence indicating that higher levels of specialized knowledge and experience leads to better identification, treatment, and outcomes for eating disorders. EDs are highly complex illnesses that often require lengthy courses of treatment, and effective psychotherapeutic treatment requires dedication of considerable time and effort (Kaplan & Garfinkel, 1999). Their high rates of relapse and low rates of full recovery require clinicians to have a great deal of patience and compassion in the face of treatment-resistance. While ED specialist clinicians of any kind are the ideal treatment providers for ED patients, they are often not the first healthcare professional patients present to, and are sometimes inaccessible altogether. As a result, it is important that primary care physicians and other generalists, such as non-specialized mental health professionals, receive adequate education and clinical experience with ED treatment.

Challenges of ED Treatment on PEI

In general, there is a lack of available information about multiple aspects of eating disorders on PEI. As far as we can tell, the province of PEI does not keep data or records pertaining directly to EDs and their prevalence. For example, PEI is not represented in the Canadian Institute of Health Information's report describing provincial data on the number of emergency department visits where EDs were the primary concern (CIHI, 2014). Indeed, it is challenging to find any information at all about EDs specific to the province of PEI. In performing Google and journal article searches, results are generally focused on national ED data, data from other provinces, and treatment centers and programs in Nova Scotia and Ontario. The only piece of data we were able to find that specifically referenced PEI was a graph depicting the inpatient hospitalization rates for EDs between 1994-1999, where PEI had the third highest rate of the 10 provinces (Gucciardi et al., 2014).

As well, medical professionals in PEI have publicly acknowledged the lack of specialist services available in-province, as well as the lack of updated training for generalists. In an interview with CBC news, the past president of the PEI Medical Society admitted that she believes medical students and residents training in PEI do not get enough exposure to clinical experience with EDs, or have any ED-specific training opportunities (CBC PEI, 2013). In 2014, PEI held a joint training session for mental health professionals such as psychologists, social workers and counselors, the first to focus on EDs in more than a decade. However, this did not involve the physicians and other medical professionals who are usually the first clinicians ED patients encounter on their treatment journeys.

Finally, it is challenging to find information about what services on PEI are equipped to assist individuals seeking help for EDs. A Google search for "help for eating disorders on PEI"

yields disappointingly few results, including links to the contact information for the Queen Elizabeth Hospital, Richmond Centre, and the directory of private practice psychologists on PEI. Searching the term “eating disorders” in the Health PEI website yields no results at all. Links to the hospital are generally unhelpful, unless an individual has reached a crisis point in the physical and mental effects of their ED and requires emergency room care. Online information for Charlottetown’s community mental health location, the Richmond Centre, provides mainly the address and phone number. It does not describe whether any of the clinicians who work there have one or more areas of expertise, which, when you are seeking community-level treatment for something as complex as an ED, can be crucial information. And while there are a few psychologists on the private practice registry who include EDs on the list of presenting issues they are willing to see clients for, their services are very costly to pay for out of pocket if individuals do not have health insurance. Thankfully, UPEI’s webpage for counseling services within student affairs does mention EDs in the list of concerns students for which students are able to seek support. It does not specify which counselor is most appropriate to see for the individual issues; however, this information may be available upon contact with the student affairs office when students make their initial appointment.

As you can see, in general, there are very few options for ED sufferers living on PEI, and the ones that do exist are difficult to find. One 2013 study exploring ED treatment programs offered in Canadian provinces reported that PEI was one of three provinces that couldn’t even be included in the study, due to “the lack of stratified intensive ED treatment available to youth” (Norris et al., 2013). In a statement to Global News for an article exposing the dire state of ED treatment in Canada, Dr. Blake Woodside, medical director of the inpatient eating disorders program at the Toronto General Hospital, referred to there being “no treatment in PEI” (Kapelos,

2014). This lack of local treatment options and information create significant barriers for individuals with EDs on PEI and may prolong the commencement of treatment, thereby negatively impacting their long-term outcome and recovery.

Justifications for Current Research

This study seeks to estimate the prevalence of eating issues among UPEI students, determine students' level of awareness about local services which provide support for eating disorders, and, where relevant, to examine their experiences with accessing these services for themselves or others. Taking into account the lack of statistical information about ED prevalence on PEI, as well as the high-risk nature of the university student demographic when it comes to EDs, a campus sample such as ours is an ideal starting point in the process of determining the rate of EDs on PEI. To our knowledge, there has not been a survey of students at UPEI addressing eating irregularities despite the significantly elevated prevalence of EDs in the university population. In addition, we were interested in exploring the extent to which students are aware of the existing resources for diagnosis and treatment, as well as their experiences in dealing with these organizations. This information has the potential to inform current medical services and mental health organizations about the effectiveness, or lack thereof, in advertising their services within the Island community, as well as what is most important from a patient perspective when seeking and accessing these services for eating issues.

There is an unfortunate lack of information about the current prevalence of EDs on PEI, as well as a lack of specialized services providing treatment. As it was beyond the scope of this study to address these issues on a province-wide basis, our university student sample allowed us to focus on a particularly high-risk subset of individuals within the Island population. This study will provide a better picture not only of the current need for services on campus at UPEI, but also

the state of knowledge on campus about what to do and where to turn in order to access support for an ED, and mental health concerns in general. These are two crucial first steps to understanding what is needed in order to improve resources on campus, thereby improving the wellbeing and prognosis for students with eating issues at UPEI.

As you can see, the current literature on EDs emphasizes their complex nature, low recovery rates, high relapse and mortality rates, and the need for specialist care and better generalist education in their treatment. Given this information, it seems clear that there is a sense of urgency within the ED experts, researchers, and specialists, to further the current research efforts into prevalence, etiology, and effective treatment methods. In examining both prevalence and treatment experiences within a subset of the PEI population, we hope that this research can be both a catalyst and a stepping stone for future ED research efforts on PEI.

Methods

A total of 202 participants (38 males, 164 females) completed the online survey, with ages ranging from 16 to 45 ($M = 24.14$, $SD = 4.05$). The majority of the 202 participants identified themselves as European or Caucasian (89.8%), with the remainder identifying themselves as non-caucasian (10.2%), which included ethnicities such as African-American, Asian, and Hispanic, among others. In terms of relationship status, most participants reported themselves to be either exclusively dating (38.3%) or single (37.3%). For the female participants, height ranged from 0 to 72 inches ($M = 64.30\text{in}$, $SD = 7.70\text{in}$), with weights from 100 to 300lbs ($M = 145.50\text{lbs}$, $SD = 34.70\text{lbs}$), while the heights of male participants were between 0 and 76 inches ($M = 69.05\text{in}$, $SD = 11.80\text{in}$) with weights ranging from 125 to 270lbs ($M = 177.46\text{lbs}$, $SD = 38.13\text{lbs}$). Body mass index (BMI; kg m^{-2}) was calculated using the self-report height and weight data.

Procedure

Participants were recruited to complete the survey on the secure UPEI server. This was accomplished through social media websites such as Facebook, Twitter and email, posters placed around the UPEI campus and word of mouth. Upon completion of the survey, participants were also offered the opportunity to be entered into a draw for a gift card with a value of \$50.00.

The participants read an information letter describing the focus of the study as UPEI students' attitudes towards eating and knowledge of supports for eating issues. This included a consent form to participate, and contact information for the researcher and supervisor in case participants had any questions or concerns about the project. Individuals who moved on to complete the survey acknowledged and gave consent to participate in the research conducted. Participants then answered demographic questions pertaining specifically to the research topic, such as age, sex, height, weight, highest and lowest weight (excluding pregnancy), and self-reported ideal weight.

Next the participants were presented with three sections of open and closed-ended questions about aspects of their attitudes toward food and eating, weight, and physical activity. The first section focused on healthy eating and exercise, and the second section involved the 26-item Eating Attitudes Test (Garner et al., 1982). The third and final section addressed participants' awareness of the availability and accessibility of information and intervention programs on PEI for those who have eating issues. Participants were assured that all responses would be kept anonymous and confidential, and encouraged to answer all questions as accurately, honestly and completely as possible.

Materials (see Appendix)

The UPEI secure server was the online resource utilized for the survey. After the information letter and consent form, participants were taken to the first section of survey questions. The first questions participants were asked to complete were adaptations of the Eating Habits and Physical Activity subsections of the Lifestyle Assessment Questionnaire (www.queensu.ca/hcnds/peermentors). This section focused on general attitudes towards food and physical activities, which included questions such as “Do you have a good understanding of healthy eating principles?”, “How often do you engage in at least moderate physical activity each week?” and “Do you eat every 2-3 hours throughout the day?”. The full list of questions can be found in the appendix.

The next section of the survey involved the 26-item Eating Attitudes Test (EAT-26; Garner et al., 1982), which is a screening measure designed to help assess eating disorder risk “based on attitudes, feelings, and behaviors related to eating and eating disorder symptoms” (Garner & Garfinkle, 1979). This inventory was selected in order to determine the prevalence of disordered eating behaviors and attitudes among the undergraduate population at UPEI. The EAT-26 has three subscales: 1) Dieting, 2) Bulimia and Food Preoccupation, and 3) Oral Control. The questions were answered on a six-point scale in response to how often the individual engages in specific behaviors, with responses ranging from never to always. These items included statements such as “I am terrified about being overweight”, “I feel that food controls my life”, and “I have gone on eating binges where I feel that I may not be able to stop”. Each item is given a score from 0-2, and all 26 items are then summed to obtain the total score. A score of 20 or higher is indicative of high levels of concern about dieting and body weight, and

is described as warranting clinical attention if the score is accompanied by other symptoms such as low body mass index (BMI) and impaired daily functioning (Garner et al., 1982).

The EAT-26 is frequently used to assess eating abnormalities among university students, which contributed to its suitability for our study. While not an official diagnostic tool, it is recognized as an effective screening measure to identify the presence of abnormal eating patterns, from subclinical disordered eating to severe and diagnosed eating disorders (Carter & Moss, 1984; Doninger, Enders, & Burnett, 2005; Garner & Garfinkle, 1979). It has been cited as particularly useful in identifying nonclinical eating disorders in women who don't fit neatly into a diagnostic category (Hoyt & Ross, 2003). A high score on this screening instrument is indicative of a concern that may warrant clinical attention, however a true diagnosis can only be obtained from a qualified healthcare professional. For the purposes of this study, the EAT-26 was used to identify tendencies toward disordered eating patterns in UPEI undergraduates.

The final section of survey questions addressed participants' awareness of the availability and accessibility of information and intervention programs for those with eating issues. This included questions such as "Which of the following have you heard of and/or used in connection with eating disorder information and/or treatment?", followed by a list of health service providers on PEI that will see patients with eating issues. For each service on the list, the participants were able to indicate whether or not they had heard of or used it. If they indicated they had used the service, participants were asked to describe their experience. At the end of this section participants were asked specific, open-ended questions about perceived barriers to treatment for eating issues on PEI, for example "Do you feel there are any barriers to people accessing/reaching out for help with eating issues on PEI? If so, what are they?" Finally, upon completion of the survey, participants were thanked for their time and participation and provided

a list of local medical, crisis, and mental health services with their contact information, in the event that they or their loved ones were in need of support.

Results & Discussion

To begin the examination of participants' awareness of and barriers to accessing mental health services in PEI, we must first understand our participants' general eating behaviors, as well as the extent to which they reported symptoms and concerns typical of eating disorders. To get an overview of participants' day-to-day routines, we examined their knowledge and application of what are considered in Canada to be "healthy eating practices" (Eating well, 2007).

General Eating and Exercise Behaviors

When asked about their knowledge of healthy eating practices, 85.6% of participants felt they had a good understanding of healthy eating, while 14.4% believed they did not. In order to get a sense of healthy eating in actual practice, we formulated questions using Canada's Food Guide and the daily serving recommendations in its dietary guidelines. The Food Guide is an evidence-based resource that is taught in schools across Canada, and research has shown that the majority of Canadians have an understanding of its recommendations (Mathe et al., 2014; Vanderlee, McCrory & Hammond, 2015). As Table 1 shows, participants varied greatly on the extent to which their eating habits were in line with Canada's Food Guide recommendations.

Table 1

Food Guide Recommendations

| | No | Sometimes | Yes |
|---|-------|-----------|-------|
| Fruit/Vegetables (7-8 servings) | 35.1% | 51.0% | 13.9% |
| Grains (6-8 servings) | 35.5% | 36% | 28.5% |
| Dairy Products (2-3 servings) | 28.4% | 29.8% | 41.8% |
| Meat & Alternatives (2-3 servings) | 23.4% | 30.3% | 46.3% |

Between 23-35% of participants reported not consuming the recommended daily servings in any food category. Participants showed the highest consistency in consuming full servings of dairy and meat products, somewhat less consistency with the grains category, and significantly lower consumption of recommended fruit and vegetable servings. There was also considerable variation in respondents' exercise regimes. When asked about exercise frequency, only 7.5% reported daily exercise, 48% exercised between 3-6 days per week, 24.5% indicated 1-2 days per week, and an additional 20% rarely exercised. Despite the variability in exercise frequency, there was a general consensus amongst participants when they were asked if they felt they should be more active, wherein 88.8% said yes. When participants identified the types of physical activity they engaged in most, running, walking, swimming, yoga, and team sports were the most commonly reported.

Participants also responded to a series of closed-ended questions about the frequency and types of food consumed, as well as particular dietary regimes followed (i.e. veganism and gluten-free diets). 36.5% of respondents reported eating every 2-3 hours throughout the day, whereas 59.5% reported eating less frequently and 4.0% eating more frequently. When asked about dietary practices, 64.2% of participants did not follow any particular dietary regime, while 21.4%

did adhere a specific approach, and an additional 14.4% did not currently but had in the past. As you can see in Table 3, the most commonly reported dietary practices were vegetarianism and veganism, followed by paleo and gluten-free diets. Participants whose diets fell into the category of “other” reported detoxes, kosher, and low-calorie diets.

Table 2

Specialized Dietary Regimes

| | Frequency | Valid Percent |
|-----------------------------|------------------|----------------------|
| Vegetarian/Vegan | 25 | 36.8 |
| Paleo (high protein) | 15 | 22.1 |
| Gluten free | 9 | 13.2 |
| Weight Watchers | 8 | 11.8 |
| Lactose free | 3 | 4.4 |
| Other | 8 | 11.7 |
| Total | 68 | 100 |

As you can see in Table 2, over one third of the total participant sample are actively engaged in food management of some kind. While some of this management seems to relate to food allergies and/or ethical practices, still others seem to be weight loss oriented in nature, for example weight watchers and paleo approaches.

Symptoms & Concerns Typical of Eating Disorders

Of the 202 participants in this study, 15.8% had an EAT-26 score of 20 or higher, which indicates problematic eating behaviors and attitudes that should be evaluated by a qualified health professional. This result is consistent with the current eating disorder literature, which shows an elevated prevalence rate of 8-17% in University students compared to a prevalence of approximately 3% in the general populace (Hoerr, Bokram, Lugo, Bivins, & Keast, 2002; Kirk, Sing, & Getz, 2001; Prouty, Protinski, & Canady, 2002; Reinking & Alexander, 2005).

Participants also responded to a self-report question about their perception of their eating behaviors and attitudes. Responses indicated that 69.3% of respondents reported no perceived eating issues, 27.1% self-identified as having undiagnosed problems with food and eating, and an additional 3.5% of respondents had diagnosed eating disorders. Anorexia nervosa was reported in 0.5% of those with diagnosed disorders, while bulimia nervosa, binge eating disorder, and eating disorder not otherwise specified accounted for 1.0% each of the remaining diagnoses. In response to questions about specific disordered eating behaviors, 15.3% of participants reported having had out of control binge-eating episodes a minimum of twice per month. 11.7% of participants had made themselves vomit in order to manage their weight, and 8.6% had used laxatives for weight control.

It is interesting to note the discrepancy between the percentage of participants who screened in the “at-risk” zone of the EAT-26 with scores above 20 (15.8%), and the much higher percentage of participants who self-reported either diagnosed or undiagnosed eating issues (30.6%). Given what researchers now know about the continuum of ED severity, it is possible that individuals who have subclinical EDs may score just below the 20-point mark on the EAT-26, despite their ED having a significant impact on their perceived quality of life (Bunnell et al., 1990; Hoyt & Ross, 2003). In light of this possibility, it may be prudent to re-examine the EAT-26 in order to expand scoring to allow for a subclinical “risk-zone” score, as we know now that subclinical eating issues frequently progress to full-blown disorders (Peck & Lightsey, 2008).

Introduction to Help-Seeking

When we consider the significant amount of participants who reported either a clinically diagnosed ED or self-identified disordered eating issue, important questions are raised with about their help-seeking behaviors. Do students seek help when they experience problematic

eating issues? Where do they go to do this? What is their level of awareness about existing local services? In order to get a well-rounded representation of EDs in university students, these and other questions must be addressed.

A significant proportion of participants, 20.5%, reported wanting to get help for an eating disorder but not having done so at the time of survey completion. When we take into account that 30.6% of participants reported either a diagnosed or self-identified eating issue in the previous section, this suggests that two thirds of students struggling with eating issues and disorders have not received any professional help. Another concerning discovery was that of the participants who scored above 20 on the EAT-26, 48.3% answered yes to the question “Have you wanted to get help for eating disorders but NOT done so?” Therefore, within our sample, almost half of the individuals whose eating behaviors are already suggestive of a clinical disorder have not accessed services, though they reported a desire to find help. Given that research has continually shown that early intervention plays a key role in positive ED outcomes, this lack of help seeking in students is problematic (A report on mental illnesses, 2002; Steinhausen, 2008; Eisenberg, Nicklett, Roeder, & Kirz, 2011). Several questions are raised in light of this finding. Why are students who struggle with eating disordered behavior not accessing professional help, when many of them report wanting to seek help for their eating? Is it due to shame or fear, perhaps of judgment or stigmatizing attitudes? Or is it because they don’t know to access the help that they report both needing and wanting? The following section will explore these questions by examining the responses of participants when asked about both their awareness of, and experiences with, the mental health services available on PEI.

Awareness of PEI Services

Participants were then asked to describe their knowledge of, and possible experience with, various health and mental health services on PEI. They were given a list of local service providers, such as community mental health services, and asked: “which of the following have you heard of and/or used in connection with eating disorder information and/or treatment?” For each service, participants were able to identify if they had not heard of the service, if they had heard of it but not used it, if they knew someone who had used it, or if they had used it themselves. The results of these responses are summarized in Table 3 below. It should be noted that “Richmond Centre” is the name of Charlottetown’s community mental health services, which are free of charge and allow individuals to self-refer.

Table 3

Have you heard of these PEI services?

| | No | Yes; haven’t used it | Yes; acquaintance used it | Used it myself |
|--|-------|----------------------|---------------------------|----------------|
| UPEI Student Services | 19.4% | 64.3% | 7.7% | 8.7% |
| Richmond Centre | 72.1% | 19.8% | 1.0% | 7.1% |
| Catholic Family Services | 69.8% | 26.6% | 2.6% | 1.0% |
| QEH Inpatient Psychiatric | 24.2% | 53.2% | 18.9% | 3.7% |
| QEH Emergency | 11.3% | 63.4% | 12.9% | 12.4% |
| PCH Inpatient Psychiatric | 57.4% | 38.8% | 3.2% | 0.5% |
| ED Specialist | 29.9% | 63.0% | 4.9% | 2.2% |
| Non-ED Specialist | 20.3% | 61.0% | 4.5% | 14.1% |
| Family Doctor or Walk-in Clinic | 5.9% | 57.8% | 8.6% | 27.8% |

It is particularly interesting to note the percentage of participants who had never heard of Richmond Centre (72.1%) or Catholic Family Services (69.8%), which are Charlottetown’s only providers of free and sliding pay-scale counseling and therapy services, on an outpatient basis.

Given that our sample consisted entirely of university students, it seems reasonable to assume that low-cost services would be important within our participant group; and yet the vast majority of them do not know where this is provided. This finding alone highlights the potential for improvement in the way this information is presented to students.

As you can see in Table 3, there were a wide variety of responses in terms of awareness and usage of services depending on the type of service in question. To get a more detailed sense of our participants' awareness of and experiences with local services, we asked them a series of open-ended questions about the services listed in Table 3, specifically in connection with eating disorders information and/or treatment. For each service listed above, participants were asked: "Would you consider using [service X] in the future if you or someone you know had issues with eating? Why or why not?" Posing the question in this way allowed participants with eating issues to discuss their own potential use of these services, while participants without eating issues were able to describe if they would suggest the service to someone who was struggling with an ED. Finally, individuals who had utilized the service in question also responded to this follow-up question: "If you or someone you know has used this service, what was the experience like?" As a result, responses to the follow-up question included both first and second-hand experiences with treatment, which broadened our degree of insight into PEI's mental health system. The following sections will examine the awareness of, attitudes toward, and experiences with these PEI services, with a specific focus on eating disordered issues. In order to maintain as much of the rich, qualitative data that results from open-ended questions, participant responses were coded for themes and grouped into categories. Additionally, the percentages reported in the descriptions of these responses will often not add up to a cumulative 100%, as many participants offered more than one answer and/or opinion per question.

UPEI Counseling and/or Health Clinic Psychiatrist

Given that our sample was made up exclusively of UPEI students, we began with the on-campus mental health services, which include counseling appointments as well as a health clinic psychiatrist who is on campus once per week. Students are able to self-refer for appointments with the counselors, but need a physician's referral in order to make an appointment with the psychiatrist. This is facilitated somewhat by the presence of a physician in the campus clinic several days a week, who can provide these referrals if the student does not have a family doctor.

Would you use or recommend this service?

In response to our inquiry as to whether not they would use or recommend this service for eating disordered concerns, 64% of participants' responses indicated that yes, they would, whereas 36% said that they would not.

Of those who said that they would not use or recommend on-campus ED services, 62% responded with a general "no", but 24% specified that their discomfort with this service is because they don't feel that it has enough expertise in ED-related concerns. For example, one participant said that UPEI's services seem "more oriented towards dealing with other types of psychiatric disorders instead of eating disorders", and another stated, "I'm not sure if that's something they specialize in and I would be worried about misinformation". An additional 14% described their reluctance to use this service as stemming from concerns about privacy when accessing on-campus mental health services. One respondent replied: "No, I don't think I would want my problem to be connected to the school", while another indicated concern about the "risk of other students seeing you use the service". Of the 64% of participants who indicated that they would use on-campus mental health services for ED concerns, the majority of those who specified a reason cited things like proximity and convenience. Interestingly, these last two

categories of responses seem to be at odds with each other: some students prefer on-campus services because of how close by and convenient they are to access, while others feel uncomfortable with on-campus assistance because a the nature of a small campus makes it harder to maintain full privacy in accessing these services.

Experiences with this service

A total of 24 participants responded to our follow-up question by describing experiences in accessing UPEI's mental health services, either their personal experience or that of someone close to them. Of these responses, the vast majority (71%) described the experience as very positive, with feedback such as: "Wonderful, they were so great, and helpful. I have recommended them to others", and "Amazing, I felt like there was actually somebody who cared about me." A few others (17%) specified that student services had been a good starting point in order to obtain an outside referral, and still others (12%) reported frustrations due to long wait times. One participant whose friend sought assistance for her ED said that her friend "told me it was useful to get referrals but not helpful enough to make an impact on their ED".

While relatively few students (12%) in our sample had first-hand experiences with on-campus counseling services, the vast majority of these experiences were reportedly positive. Participants who did not find student services helpful generally needed more long-term or specialized help, which many of them were referred on to through their student services appointment. Given that eating disorders often require frequent and long-term care, they are ideal candidates for off-campus referrals, which is a practice that is clearly employed by UPEI counselors.

Richmond Centre

Richmond Centre is the name of Charlottetown's community mental health services location. It houses a range of clinicians, from clinical social workers to a psychiatrist, all of which are free of charge and accept self-referrals. This is, to our knowledge, the only mental health service in Charlottetown that provides outpatient, non-emergent care at no cost to patients. It is especially surprising, then, that when we refer back to Table 3, 72% of our participants had never heard of it. This confusion about the nature of Richmond Centre's services and general unawareness of its existence was a theme that ran through the open-ended responses as well.

Would you use or recommend this service?

Of the participants who responded to our question about using and/or recommending Richmond Centre, 42% said that they didn't know what the service was, 38% responded that yes they would use/recommend it, 12% said that they would not, while 7% said maybe.

From the 42% who reported not knowing anything about Richmond Centre, statements such as "if whatever it offers is a good service and someone I know or myself could benefit, I'd use it", and "no clue what it is, but if it offered help in something I needed help in, I would", many participants made it clear that while they didn't know about Richmond Centre, they weren't uninterested in its services, either. These individuals indicated that if they knew more about this particular service, they would, in fact, be making use of it or recommending it to their friends. This suggests that there may be a lack of targeted advertising or awareness promotion about this service within the university population. As well, it is possible that the name "Richmond Centre" is sufficiently ambiguous that students may, in fact, have heard of it, but dismissed it at the time because it does not overtly appear to be associated with mental health.

Of the 38% of participants who said that they would use or recommend the Richmond Centre, there were a few interesting specifics included in these responses along with the more general “yes” responses. In line with some responses about UPEI’s on-campus services, some participants indicated that their interest in using Richmond Centre is related to enhanced privacy and anonymity in an off-campus setting. For example, one participant said that they would be interested, “considering it would be outside of my school life and more private for my personal life.”

Since privacy and anonymity have already become clear themes of importance to the students in our sample, it is worth noting the distinct possibility that some of the students who felt uncomfortable using on-campus services for eating issues may also be part of the 72% who hadn’t heard of the free, off-campus Richmond Centre option. If the students who would not seek help on campus for privacy reasons do not have accessible information about more private, off-campus options, they may become stagnant and not seek help at all. It seems important, therefore, to reexamine the current methods of disbursing information to students about mental health, and what local services are at their disposal.

Experiences with the service

There was quite a range of experiences reported by participants who had gotten help at Richmond Centre themselves or knew of a loved one’s experiences. The majority of them (57%) were positive, with respondents describing their care there as anywhere from good to excellent. When asked to describe the experience, one participant said, “They are quite lovely. I’ve been very pleased with the speed of access and the counselors I have seen.” While not all participants disclosed the specific mental health concern that took them to Richmond Centre, the majority of

those who did have positive experiences specified anxiety and depression as presenting issues, rather than ED-related concerns.

The remaining Richmond Centre experiences were reported as negative, and further coded into two categories: generally negative experience (29%), and negative due to being ill-equipped to deal with EDs (21%). Here is a participant describing their time at Richmond Centre:

I will never go back. I saw [psychiatrist's name] as an adolescent and he disclosed personal information about my sister to me who I had not known was seeing a psychiatrist. I found out just last month he had also discussed both my personal information and my sister's to my younger brother. This was an extreme breach of trust and also against their code of ethics. I have told other doctors this and am relatively upset that he is still practicing. No one should be seeing him, especially those with trust issues.

Within our sample, negative experiences like this one, with the psychiatric services at Richmond Centre, were specifically mentioned multiple times, whereas the counseling and therapy services there were reported as generally positive experiences. The above quote is another example of the theme of the importance of privacy within our participant sample, so we can already see that this is an important and often problematic issue within PEI's mental health system.

A few participants discussed seeking help specifically for ED-related concerns at Richmond Centre, which was particularly interesting for our study. As one participant described it: "I did get some assistance from Richmond Centre, but I do not feel they are equipped to deal with EDs. I didn't have a specialized therapist." The common thread among participants who sought ED-specific help at this location was that there were no options available to them beyond

a generalist approach to mental healthcare, which they perceived as insufficient in treating their EDs. In the following quote, a participant suffering from an ED provided a thoughtful perspective on why these generalist services did not suffice in treating their disorder.

I felt like they didn't understand what I was going through. It felt like they didn't relate to me in a meaningful way. It seemed as though their objective was rigid pedantics rather than come to an understanding of how and why the ED is affecting me. The diagnostic criteria has changed but it felt like they were only searching for behaviors that fell specifically within the spectrum covered – as opposed to seeing indirect symptoms or behaviors that influenced my ED.

This participant suggested that clinicians who have just a basic knowledge of eating disorders are often looking at surface symptoms only, rather than conducting the in-depth examination of underlying beliefs and patterns that research tells us must be addressed for ED treatment to be effective (House et al., 2012; Kaplan & Garfinkel, 1999). So within our sample, participants with anxiety and/or depression generally reported more positive experiences with the generalist mental health services of Richmond Centre than did patients for whom EDs were the presenting issue.

Catholic Family Services

Catholic Family Services (CFS) is a not-for-profit family services agency in Charlottetown that offers a variety of therapeutic services to children and families. Largely staffed by clinical social workers and music therapists, the center provides individual, family, couples and group counseling, and offers these services on a sliding pay scale. This is the only service in Charlottetown that offers a sliding pay scale, to our knowledge. It is also important to note that their title is a bit misleading; they are not as rigidly tied to the Catholic Church as they

were at their founding, and they do not advertise themselves as a faith-based organization. In fact, the mission statement on their website clarifies that services are “available to all regardless of age, race, creed/religion, material status, sex, and sexual orientation”

(<http://www.catholicfamilyservicesbureau.com>).

Would you use or recommend this service?

Considering that it is likely the second most affordable non-hospital mental health service in Charlottetown, it was surprising to learn that 66% of our sample had never heard of CFS. Even more surprising, however, was that a whopping 81% of participants said that they would not use or recommend this service for eating-related concerns, leaving just 19% who were willing to consider using CFS. The participants who responded “no” fell into one of three categories: general “no” response (27%), “no” because he/she had not heard of CFS (22%), and “no” because he/she is not religious (51%).

It is clear that as well as a lack of awareness about the existence of CFS, there is also a great deal of misunderstanding about the nature of their organization. When asked if they would use CFS, participants responded with statements like “no, religious sounding”, “no, I’m not Catholic”, “no, I’m Muslim”, and perhaps most disconcerting, “no, I’m gay”. We can see from these responses that the lack of clear information on both the existence and nature of this service has lead students from multiple demographic categories (atheist, Muslim, LGBT, etc.) to believe that they would not be good candidates to receive care at CFS. This is concerning because it is in direct opposition to the actual mandate of the organization, which emphasizes inclusivity and accessibility. For some participants, who were aware that CFS is no longer run by the church, the service title was still off-putting: “Probably not. While I am aware their services are not faith-focused, I am uncomfortable using religiously-oriented services.”

It is clear from the responses to this question that even something as minor as a title can cause a lot of confusion. The majority of our participants read the name of this organization and based on that information assumed that it was a service they would not consider using.

Unfortunately, that assumption alone could prevent them from looking into the details of the organization and discovering that: 1) their services are non-religious, 2) their waiting times are much shorter than, say, Richmond Centre, and 3) they operate on a very affordable sliding pay scale. Without these important details, it seems from our data that many people may be missing out on a service that would be both helpful and affordable to them.

Queen Elizabeth Hospital Emergency Room

The Queen Elizabeth Hospital (QEH) is located in Charlottetown, and has a 24-hour emergency room (ER) that also serves the residents of small communities in the surrounding areas. As there is no mobile mental health crisis team or emergency services that are mental health-specific in Charlottetown, residents needing immediate care for mental health issues must go to the ER. Since EDs often lead to serious physical health complications, they are a common mental health concern in hospital and ER settings (CIHI, 2014; Dooley-Hash et al., 2013).

Would you use or recommend this service?

When asked if they would consider the ER services at the QEH for assistance with ED-related issues, 66% of participants said yes, while 34% responded that no, they would not. Of the participants who were willing to use or recommend the ER for ED concerns, approximately half replied with a general yes response. Within these more general “yes” responses, many participants referred to common themes such as the fact that an ER has medically trained professionals, is the best option for emergencies, and is a logical place to go for any health issue. One participant said that the ER “would probably be the first place that I would think of to send

someone with an eating disorder”. The other half of the “yes” responses said that they would consider the ER, but only if the circumstances were extreme; some even said it would need to be a life or death situation. Some responses to this question included statements like: “yes, if it was severe enough”, “if it was life or death, probably”, and “sounds a little extreme for help with eating. I would go if it was really bad.”

Of the participants who said they would not use or recommend the ER for ED-related issues, the underlying reasons for this “no” response were divided exactly in half. 50% of these participants responded with a general no response, which included a few mentions of the widespread expectation of very long wait-times in an ER setting. The other 50% of “no” respondents said that they wouldn’t use the ER for ED-related concerns either because they don’t perceive EDs as serious enough for emergency attention, or because they didn’t feel the ER is equipped to effectively manage ED cases. One such participant said “no, the emergency department isn’t really equipped to deal with that unless it is an urgent matter at the moment”. A similar response from another participant was this: “Probably not for myself. Wait times are long and it does not seem like the kind of thing that would merit a trip to emergency/outpatients.” Finally, one participant said “No. I don’t think they would do much to help eating issues at emergency/outpatients.”

Clearly, our participants are fairly divided in their opinions about the use of emergency room services for eating disorders. This is especially interesting in PEI, where not only is there a large subset of the population without a family doctor, but also a general lack of specialist mental health services, especially for eating disorders. As a result, for many Islanders, the emergency room may be the only available course of action, save for outpatient clinics, which operate only during limited daytime hours. More specifically, it is interesting that so many responses to this

question described beliefs that eating disorders aren't serious enough to merit emergent care, or that if they do, the patient should only seek ER services when they have severe physical ED complications. Given what we know from the literature, individuals with EDs actually utilize emergent care services much more frequently than the average person (Dooley-Hash et al., 2013). As such, while this type of service is clearly not ideal for providing longer term specialized ED care, it might benefit from increased screening and referral programs, as well as increased ED-specific training for staff.

Experiences with this service

We now know that, within our sample, participants had a variety of opinions about using the ER for eating disorders; so how do those who have used it describe the experience? 31 participants responded to this follow-up question, describing either their own experiences or those of a loved one, about receiving care in the QEH emergency room. Of these individuals, 45% mentioned the issue of long wait times and/or slow service, although not all of them described that as making the experience a negative one, with one person stating that it was “a long wait, but effective treatment”. An additional 39% described their experiences from acceptable to good/great, with statements such as “they helped get the necessary needs for the person”, and “it was quick and efficient; a pretty quiet night”. One participant, who sought ER care for eating disorder issues, described her experience as generally positive:

In emerge I felt like the admission nurse was empathetic and concerned. The outpatient programs available are limited. I didn't continue a program long enough to make a full assessment because the program itself didn't appeal to me.

Still other participants (19%) described their experience accessing ER care as negative. Given the size of our sample and the nature of participation as voluntary and not ED-specific (we chose

not to sample only eating disordered students), some of the direct experiences described by participants involve accessing care for issues other than EDs. It is interesting in this ER question, however, that the majority of responses that did involve ED-specific help seeking fell into the “negative” category of coded experiences. In describing the experiences of a friend with an ED, one participant said “they disregarded her eating disorder and told her that she should just eat something. Very disrespectful and did not give proper attention to her.” Two other participants reported not having been taken seriously when they presented at the ER as a result of their eating disorders.

From these results we can see a few emerging trends about emergency department care. A theme when accessing this kind of service is longer wait times, although on quieter nights patients may not experience this. The majority of positive experiences with care were not ED-specific, though a few were, whereas all of the negative reported experiences were cases of ED patients. This may be a result of the generalist nature of an emergency room, where the majority of what doctors and nurses treat are acute physical illnesses and injuries. And even though ERs have seen increasing rates of mental health concerns in recent years (CIHI, 2014; Dooley-Hash, Lipson, Walton, & Cunningham, 2013), trauma physicians and nurses may not have a great deal of experience specifically with ED patients and the complex nature of caring for them. In fact, research shows that medical schools devote very little time to training in ED diagnosis and treatment, and that doctors often report a self-perceived lack of skills and expertise in this area (Linville, Brown, & O’Neil, 2012; Lafrance-Robinson, Boachie, & Lafrance, 2013). Given the current body of research, it appears that our participants are justified in their apprehension to access ED care in an ER setting.

Queen Elizabeth Hospital Psychiatric Unit

A more intensive option at the QEH is the inpatient psychiatric unit, more commonly known as “Unit 9”. The unit is small and includes 4 beds devoted to youth psychiatric patients, though these beds in particular are almost always full (“Family struggling with PEI mental health service shortage”, 2014). As a result, there can be waiting periods for access to this service. In order to be admitted, a patient would need the referral of a doctor, including emergency physicians if the patient has sought mental health care through the ER and requires inpatient treatment. We expected fewer of our participants to have had firsthand experiences with Unit 9, as it is more of a “last resort” option than the other outpatient-based services in our study. Again, percentages will not add to a cumulative 100% because some participants provided more than one reason for their answers, which resulted in one response being coded into 2 separate categories.

Would you use or recommend this service?

The majority of participants (88%) said that they would use or recommend Unit 9 for eating disorder care. Of these “yes” responses, approximately half said yes because they felt that the hospital has trained medical professionals, and the psychiatric unit staff would be qualified to help with ED concerns. One individual said yes because they felt the “services offered by the hospital are more reliable and more professional.” Another said: “Yes. Unit 9 has 24/7 care for those struggling with mental illness. Doctors and nurses are there when you need them. You are closely monitored in a secure and supportive environment.” The other half of participants who responded “yes” did so under the caveat that they would only access this service if they were in a very severe or life-threatening situation. Some of these responses included statements like “if it

was super serious”, “yes but only in critical situations”, and “if the problem was severe enough, yes”.

An additional 12% of participants responded that they might use Unit 9 for ED-related concerns, but only if they were forced to do so by family or healthcare professionals. One participant, who talked specifically about their ED, said: “I would suggest it for others. I think in my own recovery the thought would cross my mind, it has in the past, but I would never act on it. I would have to be forced into it.” Another said “only if I was forced; it is an awful place, especially for minors.”

Finally, 15% of participants responded that they would avoid Unit 9 altogether, due to both the stigma tied to this service and the attitudes within the Unit itself. One participant said that they would feel “embarrassed to go there”, another described it as sounding “extremely intimidating”, and multiple participants referenced the unfortunate negative stigma in the community about Unit 9. Even more interesting than the comments on stigma, however, were the comments about eating disorder treatment within Unit 9. For example: “I’m not sure that sending someone there would be the best solution. I think an eating disorder might get pushed to the back burner of their concerns there.” More than one other participant in this category shared this participant’s concern that EDs would not be prioritized or taken seriously. Perhaps the most striking response here, though, is this one:

Not with an eating issue. If I was anorexic or bulimic maybe. But I binge eat. And I don’t think I would for that. It doesn’t seem like a big enough issue.

Overall, it is a positive sign that such a high percentage of participants indicated willingness to access psychiatric ED services in a hospital setting if necessary. However, some themes in response to this question are concerning. Many participants held the belief that patients

should not use this service unless they are in a severe, potentially life-threatening state of health. This could result in individuals with serious EDs waiting too long to seek treatment because they do not perceive themselves as “sick enough”, and in the meantime their physical health may suffer irreversible damage. It is also interesting that multiple participants referred to the belief that EDs would not be taken seriously, suggesting that this may be the case not only in the public discourse about EDs, but even in medical settings. What is unfortunately less surprising is the fact that stigma and negative attitudes about inpatient psychiatric care were reported as deterrents from accessing Unit 9. Current research highlights the continued stigmatization of mental illness in general (Health State Descriptions, 2012) as well as with eating disorders specifically (Griffiths, Mond, Murray, & Touyz, 2015), and PEI is clearly no exception when it comes to this particular problem.

Experiences with this service

In contrast to our initial expectations, more participants had descriptions of experiences with Unit 9 than they did for Richmond Centre, Catholic Family Services, or Student Services. A total of 27 participants responded to this follow-up question with descriptions of their own experiences or those of someone close to them. Of these experiences, 18% were categorized as positive. One participant, who had been an inpatient on the unit, said: “Good. It was what I needed at the time. I felt safe there while I was getting better, and they connected me with resources to help me continue my recovery after I left the hospital.” Another 33% said that they did not know for sure if the experience was good or bad. This category was made up mainly of participants who were speaking on behalf of friends and family who had been inpatients on Unit 9, and couldn’t say with certainty if the experience had been helpful. For example, one participant said, “I was not close enough to them to know how they felt about the treatment. It

appeared to help them”. Another individual, whose friend had been on the unit for ED-related reasons, said “the person no longer shows signs or experiences the effects of an eating disorder so I guess unit 9 did the trick.” It would appear in this scenario that Unit 9 was potentially helpful to this patient; however, given that the participant clarifies this as their own assumption, and was not overtly told by their friend (the patient) that Unit 9 was what helped her recover, we can not validate that assumption here.

Unfortunately, 41% of participant responses to this question described highly negative experiences with the inpatient psychiatric unit. As with previous questions, not all cases described were ED-specific, but each response provided valuable insight into the spectrum of experiences that can occur in mental healthcare settings. Take this detailed participant response, for example:

In highschool, I was struggling with severely distracting thoughts of suicide. I made what I thought was the right decision for myself and my family and checked in. It was like a prison. There was another girl there who was only there because a group home didn't want to deal with her behavior, not because she was suffering from mental illness. My room was like a cell with graffiti all over it from what I'm assuming was a bunch of other under age delinquents. They called me over an intercom to line up for my medications with all the other patients including the adults, some of which were quite scary/murder looking. The unit psychiatrist was away so they held me there until he got back. There was no feeling that anyone wanted to help me. Someone shone a flashlight in my face every half hour during the night while I was trying to sleep and they gave me metal utensils with my meals which they didn't care if I ate or not, that I easily could have stuck in the outlet in my cell. Not a place conducive to healing, it was a nightmare.

This participant represents the more intensely negative experience in this category, as they clearly experienced fear and a lack of warmth from the facility and medical professionals there. Another participant described the care in Unit 9 in the following terms: “They are of very poor quality and did not help the people I know who have entered. It is too drug focused and there is not enough therapy to help identify and manage the root of the problem.” And finally, a participant who was an inpatient as a result of their eating disorder described their experience in the following quote:

I felt more like a prisoner than a patient. I would rather die than be put back in that place. Confidentiality was breached among other things. I felt that the general attitude towards me was either indifferent or that of impatience. They are not at all equipped to deal with EDs among other things.

This last statement was echoed by another response, which stated that, “as with the other services mentioned, I don’t feel they are equipped to deal with EDs.” Another participant described their experience as a mixed bag; they felt like they had benefitted from some of the structure that inpatient admission provided, but described a similar lack of warmth and therapeutic care at the same time.

These descriptions paint a vivid picture of what an unpleasant psychiatric admission is like for a patient. It should be kept in mind that they are, of course, subjective in nature. However, patient perspective is important, and often undervalued in mental health and eating disorder research (Bardone-Cone, 2012). In this instance, our results included more negative direct experiences than positive with Unit 9 admissions, especially when it came to patients who were there as a result of their eating disorder. This has important implications due to the aforementioned ED inpatient admissions statistics, the most recent of which indicated that PEI

had the third highest rate of the Canadian provinces (Gucciardi, Celasun, Ahmad, & Stewart, 2004). There is no ED-specific treatment center or program on PEI. This means that residents who develop serious EDs and/or severe physical complications as a result of an ED only have inpatient psychiatric admission for treatment, unless they are able to seek out of province care. It seems important, then, that PEI's inpatient psychiatric units are equipped and able to provide effective and up to date care for patients with eating disorders.

Private Practice – Eating Disorder Specialty

We now shift our focus away from larger organizations such as hospitals and community mental health, to focus more on local private practice options. Participants were asked if, within the context of eating disorder care, they would use or recommend a private practice clinician, such as a therapist, psychologist, or clinical social worker, who had a specialization in eating disorders.

Would you use or recommend this service

An overwhelming majority of 84% of participants responded that yes, they would access clinicians with an ED-specialty if and when they sought ED treatment. Almost all of these participants cited clinical expertise, knowledge and experience with EDs as the reasons they would feel confident in the treatment of an ED specialist. Many participants said that they would have more trust in a clinician who specialized in EDs, with statements like: “yes, if someone is specialized, I would trust they could help me with my issues”, and “yes; special training, qualification, or experience in the area of eating disorders would make me more trusting and confident in their care.” Some participants explained that they would prefer an ED-specialist because they would have more relevant and ED-tailored training in order to get to the root of the issue and provide effective treatment. For example, one participant said this: “Absolutely. They

are specialized in this area and are up to date (hopefully) on the best practices and effective treatments.” Another participant felt that specialists “would be more helpful (and willing to help) because they understand it more and are less judgmental.” This last suggestion about ED specialists being less judgmental and even less stigmatizing was mentioned by multiple other participants as well, and is backed up by evidence in eating disorder research. The more ED-specific training and experience that clinicians have, the less likely they are to hold stigmatizing attitudes and beliefs about ED patients, and the more likely they are to provide compassionate and effective care (Currin, Waller, & Schmidt, 2009; Satir, 2013; Girz, Lafrance-Robinson, & Tessier, 2014; Griffiths, Mond, Murray, & Touyz, 2015).

Significantly fewer participants (9%) responded with some variation of “no” or “maybe” to the question of accessing services from an ED specialist, and the reasons they provided were varied. Some of these participants responded with just a general “no” or “maybe” and did not elaborate further. A few others explained that they would be hesitant to access this service unless they “knew someone who had a positive experience with that expert”, and had themselves conducted an evaluation of “the person’s capabilities and credentials.”

Finally, about 6% of participants responded that they didn’t think ED-specific services exist on PEI. This is an interesting point that is true in some respects, and not in others, depending on how you look at it. There is no eating disorder clinic or facility on PEI, nor is there a specialized section of a hospital or inpatient facility for eating disorder patients. There are no dietitians or physicians who deal primarily with eating disorders on PEI. There are a select few clinicians (mainly clinical social workers and/or psychological associates) who have better than average ED training, and are the most experienced local clinicians because they have received the majority of ED patients here over the past few decades. PEI did used to have an “eating

disorders team”, described as an informal network of nurses, social workers, dieticians, and at one point a psychiatrist, involved in treating clients with EDs. We were able to contact a clinical social worker who was involved with the team for many years, who provided this description of how the team worked:

The team provided direct care to clients, shared resources for ongoing education, provided consultation within the team, provided consultation to other services involved with clients (ie addictions, education), and maintained a working relationship with our primary services for referral: the QE II eating disorders day program, Homewood, and the IWK. During my time with the team, we also organized and hosted two Atlantic conferences on the treatment of eating disorders. Our challenge was always our small population and client base. For example, if we had 20 clients in treatment but the youngest was a twelve year old from Tignish and the oldest was a 79 year old from Charlottetown, this didn't really work for a group format. Plus, clients having to travel to town in the winter was always an issue – we had clients of all ages, from all areas of PEI, with varying severity of ED symptoms – add in concurrent disorders like addictions and coming up with a “program” gets very tricky” (L. Livingston-Pollard, personal communication, 2016).

She also expressed a belief that the team does exist today, but in a diminished capacity compared to what it was 2 decades ago. As well, in keeping with the theme of ambiguous information about available ED services, the existence of this team and the names of the clinicians involved do not seem to be available anywhere that is publically accessible.

So generally, these participants were on the right track when they responded with doubts that PEI currently has any professionals with a dedicated specialization in eating disorder

treatment. While some local clinicians certainly have higher levels of knowledge and more experience with ED patients, there is no specialist on PEI for people suffering from eating disorders.

Experiences with this service

Given that PEI does not currently have a clinician specializing in the treatment of eating disorders, it is not surprising that only 8 participants (4% of our overall sample) responded to this follow-up question, describing their experience with an ED-specialist. However, of these participants, the vast majority (7 of the 8 individuals) described the experience as positive. One participant, describing the experience of a friend or family member, said that “from my understanding she really enjoyed her help, and it helped her a lot in her road to recovery.” In keeping with the lack of such services here on PEI, one participant said this: “I have not seen any specialists on PEI, but I have gone to Homewood and done their ED program, which is excellent.” Homewood is a residential treatment facility in Guelph, Ontario that treats a variety of mental health and addictions issues, to which PEI patients with serious EDs are often sent as a result of the lack of local treatment options. This participant’s response does raise questions about whether it would have been necessary for them to have gone so far from home for treatment if PEI had a local specialist in place, but it is also useful to hear about a positive ED experience at Homewood’s facility.

The one remaining participant who did not fall into the “positive” experience category for ED specialists talked more generally about the fact that they have had many negative experiences with health care professionals, rather than referencing a specific specialist experience that was negative. In this respect, we cannot make inferences about actual experiences with specialists,

since the participant did not differentiate between general and specialized health care professionals.

Research continues to support the finding that a specialized background in ED treatment contributes to positive prognosis for patients, and can even be crucial to successful treatment outcomes in some cases (Currin, Waller, & Schmidt, 2009; Von Ranson, Wallace, & Stevenson, 2012; Williams & Leichner, 2006). What we can see from our data in these open-ended questions is that many patients are keenly aware of this, and they report that it has a significant impact on their perception of the treatment they receive. Knowing that their treatment provider has a specialized background and training in eating disorders would reportedly provide our participants with a greater sense of trust, and confidence in the professional's ability to provide effective care. These are just two components of a positive therapeutic alliance, which is often positively correlated with successful treatment outcomes in ED patients, especially those with anorexia nervosa (Antoniou & Cooper, 2013). In short, both healthy and eating-disordered participants reported a preference for expertise when it comes to treatment for eating disorders, which closely aligns with current ED literature in emphasizing the importance of specialized care for this patient population.

Private Practice – Non-Eating Disorder Specialty

Due to the lack of mental health clinicians on PEI who specialize in eating disorders, it is likely that individuals with EDs and related concerns have sought care from a non-specialist at one time or another. Even if they have not done so currently, they will likely end up with non-specialist care in the future, should they decide to seek out private practice clinicians in PEI. In light of this, participants were asked to describe their perspectives about utilizing these services for EDs on PEI.

Would you use or recommend this service?

There was a fairly even split within our participants in terms of their willingness to access a non-specialist clinician for ED-related concerns. 48% responded with variations of “yes”, 41% responded no, specifying that EDs should receive specialized care, and 11% responded with “maybe”, but that they would prefer the care of a specialist.

Of the participants who said they would be willing to seek ED treatment from a non-specialist clinician, the majority of them (67%) either responded with a general “yes” and no further elaboration, or said yes because non-specialist help is still better than no help at all. For example, one participant said this: “Yes, it’s best to get help if you have an issue that you can’t solve yourself, even if that help doesn’t specialize in your problem.” Another such participant said they would still consider a non-specialist when seeking ED care because “they may still have experience with this issue, and they may still be able to offer helpful guidance and techniques.” Some of these participants also suggested that non-specialists may be able to provide referrals, with statements such as: “Yes, because they could direct you to further help”, and “these professionals should be able to provide information and support, and if they aren’t able, they would refer you to someone with better resources”.

The remaining “yes” responses (33%) reported that yes, they would be willing to access non-specialist assistance, but with the caveat that they would do so only if there were no specialist options available. Some examples of participant statements like this are: “yes, but only if other options were not available”, “their help would possibly be better than nothing but I would rather use/recommend one who specializes in eating issues”, and “only if a specialist was not available.”

Within the 41% of participants who indicated that they would not seek ED treatment from a non-ED specialist, every single one of them said that this was because they felt that a specialist or expert in this field is necessary. One participant said that if a clinician didn't have ED-specific training, they "would not trust them to have as much insight into the issue of eating disorders". This emphasis on expertise and experience was a theme throughout these responses, with descriptions like: "likely not – a specialist with experience in this subject would be key", and "no, it would be necessary to have an expert in this field". All other descriptions these statements, emphasizing that clinicians with more ED training and experience are perceived by our participants as more knowledgeable, trustworthy, effective, and have the necessary expertise to provide ED treatment.

Finally, the remaining 11% of participant responses to this question described variations of the statement "maybe, but I would prefer a specialist". For example, one participant said "possibly, but I would rather seek a specialist's help", and another said "maybe, although I believe the ones who specialize in eating disorders would better treat those with eating disorders". Overall, it is clear in the detailed responses from participants that regardless of the "yes", "maybe", or "no" that preceded it, the overwhelming majority of statements report an underlying belief that specialist care is preferable to non-specialist care when it comes to eating disorders.

Experiences with this service

19 participants responded to our follow-up question about non-ED specialists, describing first- or second-hand experiences with this kind of service. Of these participants, 63% described the experience as positive, while the remaining 37% reported negative experiences. Within those

who reported positive experiences, one third specified that the experience was a positive one but that it was not for ED-related issues. One participant summarized this perspective by saying this:

My issue was not food related so I found the professional very helpful. However, if the issue was eating related I would rather a specialist in that field. I do understand that is not always possible.

The remaining positive experiences were more general in nature, with statements like “good, I felt safe”, and “a great insight into my problems and how to fix them. A sense of hope and relief most of the time.” While responses did not get more detailed than these ones, it is heartening to know, even generally, that some individuals are having success in non-specialized settings.

Participants who reported negative experiences with non-ED specialists provided a bit more detail in their responses to this question. Here, one such participant describes a time where they sought help from a therapist for their ED:

Not good. I went to see a therapist about my eating disorder in grade nine and it was a terrible experience. I got nothing out of it. I went to see her a few times, we talked, but I never felt comfortable with her to really tell her any of my real thoughts, and she sent me away “cured” with a flick of a magic wand (no joke). I didn’t like her so I did not object to not seeing her anymore even though I wasn’t “cured”.

Another participant voiced similar issues with regards to communicating when a clinician doesn’t have a background in EDs: “It is frustrating to speak with therapists who do not specialize in EDs because they do not understand a lot of what is going on, and therefore are not much help.” This particular category of responses mirrors what we have seen in previous questions: the participants who report the more negative experiences with generalist services are the participants seeking help for their eating issues.

Current eating disorder literature emphasizes the importance of specialized training, education, and experience for clinicians providing treatment to this patient population. Studies have shown that clinicians without this specialized knowledge are less likely to provide empirically supported treatments, hold fewer negative attitudes toward ED patients than clinicians with a more general background, and provide more effective care (Kaplan & Garfinkel, 1999; Von Ranson, Wallace, & Stevenson, 2012). Due in part to the self-reinforcing nature of eating disordered behavior, among other things, these illnesses are widely acknowledged as some of the most complex and difficult to treat (Kaplan & Garfinkel, 1999). It follows, then, that a highly specialized understanding of the intricacies of both the illness and the treatment options is necessary in order to provide effective care. We can now see that participants themselves echo the statements we see in the literature, in that they report more confidence and trust in clinicians with specialized knowledge and experience, as well as a preference for said clinicians when seeking treatment.

Family Doctor

Family doctors are generalists by nature. However, they are frequently the first point of contact for many complex cases that will require specialized treatment, such as eating disorders. EDs often present their first identifiable signs and symptoms in interactions or routine encounters with family physicians (Linville, Brown, & O'Neil, 2012). In light of this, it is important to include family doctors as well as mental health professionals when examining the services and treatment provisions received by those with eating disorders.

Would you use or recommend this service?

In response to the question of whether or not they would seek help from their family doctor for an eating disorder, 82% of participants responded that yes, they would, while just 18%

indicated that they would not. Of the participants who said yes, 51% did so with a general “yes” statement, such as “yes, why not seek help for your issues”, “yes because they are professionals”, and “yes, that would be my first step”. An additional 19% of participants who responded “yes” to this question described their willingness to go to their GP with ED concerns due to their existing comfort level, history, and foundation of trust with their family doctor. One participant said they would contact their family doctor “because I trust him so much”, and another said “I would likely consider my family doctor above all other options due to close ties and trust built over several years”. Some of these participants talked specifically about patient history and the fact that GPs often know their patients very well, with statements like: “Family doctors have a plethora of medical history for their patients so could be a good springboard”, “My family doctor knows my situations and would be able to appropriately diagnose me”, and “Yes, because family doctors usually have a good idea of what healthy and unhealthy means to you”. Still others described their high level of trust and comfort in the care of their GP. Examples of this include descriptions such as: “especially a family doctor because they are reliable and trustworthy”, “yes, I would feel as though it would be a comforting experience”, and “a family doctor is a safe place to talk about my issues”.

Another 30% of these yes responses indicated that they would go to their family doctor with ED concerns, but for the purposes of obtaining a referral to more specialized services rather than receiving ED treatment from the doctors themselves. One participant described this perspective in the following statement: “Yes, I would see them but they would not be the main help I would like to receive. Instead they can guide you in the right direction for mental health options.” Others categorized a family doctor’s role in ED treatment as a first step in seeking help, which would lead to these referrals. This was described in statements like: “Yes, good place to

begin looking for help; they could point you in the right direction”, and “Yes, because they are immediate help rather than waiting. Then they can refer you to someone who specializes.” Many of these participants mentioned that the referral they would request from their family doctor would be to a professional with an ED specialty. For example, one participant said that they would see their GP “for a basic assessment and referral, but not for continuing care unless related to physical health”. Others said things like “they can make recommendations to people with experience”, and “yes, but probably more so for them to point me in the direction of someone with more knowledge/experience on the disorder”. Overall, these participants reported a willingness to use their family doctor as an initial point of contact for help with an ED, as well as a desire to be referred on to more specialized services.

As for the smaller subset of participants who would not seek assistance from their family doctor for eating-related issues, 43% of them did not provide a detailed explanation and simply responded with general “no” statements. The remaining 57% said no to family doctor assistance because they feel that eating disorders require the care of a specialized professional rather than a general practitioner. Some such participants cited a GP’s more limited knowledge of these complex mental health issues, with statements like “their area of expertise is often biophysical rather than biopsychosocial”, and “I would feel that they would not have sufficient knowledge of the subject”. Others described doubts that a family doctor would have enough time to devote to patients with such demanding conditions. One participant felt that family doctors “might not be able to provide the long-term advice and help that the person might need”, and another said they were “not sure if GPs would spend enough time with struggling patients; they’re so busy!” While the vast majority of participants reported a willingness to take their ED concerns to their family

doctor, the participants who said they would not see their family doctors for EDs also raised some important concerns.

Experiences with this service

A total of 42 participants responded to the follow-up question with descriptions of their own experiences or those of loved ones when dealing with their family doctors. Some of their descriptions involved multiple statements, which were coded into separate categories where it was appropriate. As a result, the following percentages sum to more than 100%. Of the participants who responded, 69% described their experience with a family doctor as generally positive. The majority of these participants specified that their experience was unrelated to EDs, although a few positive experiences did come from participants with EDs. One such participant said that their “issue with eating disorders ran in the family, thus the doctor was aware and helpful”. Another participant who sought help from their family doctor for an ED said this: “My experience with my family doctor dealing with eating issues was very positive and I would recommend that others consult family physicians as well.” Examples of non-ED related positive statements include things like “my family doctor is great”, and “not related to eating issues, but I have had only good experiences with my family doctor”.

Another 19% of participants said that their family doctor provided them with a referral when they sought care for an eating disorder. Most of these participants did not openly categorize their experience as positive or negative. One individual reported that they “got the information/referral needed, but there was no help other than that”, and another said simply that a “referral was made and addressed in short order”.

Finally, 33% of participants reported having had negative experiences when dealing with a family doctor. About one third of these negative experiences stemmed from long wait times or

short, rushed appointments. The remaining third of these experiences were described as having been negative due to the family doctor being out of their depth when dealing with eating disorders. One participant described their GP as “lacking in knowledge of best practices when it comes to certain disorders and how to handle them”, while another described theirs as “out of their depth in the subject matter”.

Responses to the family doctor questions were similar to those from both the specialist and non-specialist private practice questions: the vast majority of participants believe that eating disorders require specialized care and treatment, and report a desire to receive treatment from a specialized, experienced clinician as opposed to a generalist. Interestingly, our participants, both with and without eating disorders, are in agreement with the most up-to-date research in this area. Current evidence shows that the more ED-specific training and education primary care physicians have, the better equipped they are to interact with and care for their patients with ED symptoms (Linville, Brown, & O’Neil, 2012; Currin, Waller, & Schmidt, 2009). For example, physicians who had more ED-specific knowledge are more likely to refer patients to specialist ED services as well as make their own follow-up appointments with these individuals (Currin, Waller, & Schmidt, 2009). Knowing when to refer patients elsewhere is a valuable quality, especially when the nature of that patient’s illness is beyond the scope of a generalist practice. As well, a desire for appropriate referrals has been a theme in participant responses to almost every question we have asked, indicating that the patients themselves would prefer a family doctor to point them in the direction of an experienced clinician rather than attempt to treat the ED on their own.

However, in order to make a referral, a doctor must have a foundational knowledge of eating disorders that is sufficiently robust for them to recognize warning signs, access assessment

and diagnostic tools, and take the appropriate next steps for their patients with EDs.

Unfortunately, studies indicate that this is most often not the case. Recent Canadian research has shown that not only do physicians report insufficient training in EDs during medical school, but the majority of them also assess their competence in assessment, diagnosis, and treatment of EDs as very low (Lafrance-Robinson, Boachie, & Lafrance, 2013; Linville, Brown, & O'Neil, 2012).

If more ED-specific medical school education for future doctors is what is necessary in order to improve this avenue of care for individuals with EDs, it seems like a worthy pursuit. Take the results from this question alone; 82% of these participants reported a willingness to seek help from their family physician for ED-related concerns, due to their existing trust and rapport they have built. Given that so many individuals would make their GP the first professional point of contact when seeking treatment, it is especially important for these clinicians to be equipped with the skills to provide effective care. We know that early intervention with EDs leads to more positive treatment outcomes and lower mortality rates, and that alone is a compelling reason to make physician training a priority, as well as ensuring that all citizens have a family doctor.

Negative Attitudes and Stigma

Having addressed a broad range of PEI's mental health services, participants then moved on to the final section of questions, each of which focused on an aspect of seeking help in PEI for eating disorders. The first of these focused on interactions with health professionals, and asked participants if they had ever experienced negative attitudes or stigma when trying to access help for eating issues. 14.5% of participants said that yes, they had experienced some form of stigma from health professionals, while the remaining 85.5% had not. Participants who selected "yes" were then prompted with a follow-up question that asked them to describe their experience. A total of 14 participants provided descriptions of the stigma they experienced in a healthcare

setting, and their responses were coded into three categories. 50% of these participants described the negative attitudes they encountered as the healthcare professional not treating their ED concerns as serious issues, as well as a lack of knowledge about how to help or treat EDs. One such participant described her sister's experience seeking help for her anorexia nervosa, saying "many medical professionals dismissed her concerns before she was finally diagnosed and started to receive treatment". Another participant who has a sibling with an ED said this: "My sister was told it wasn't a big enough deal that she was bulimic and to come back when the problem became more serious." Yet another individual reported having sought help for their ED in the local emergency room, only to find that the doctor "did not believe that she was actually sick". While experiences like these are likely not the norm in PEI's healthcare system, they are concerning nonetheless and certainly merit attention.

Another 36% of these participants said that the stigma they experienced involved patient-blaming attitudes from healthcare professionals, and being made to feel that their ED was their own fault. This participant described her friend's experience in the ER: "My friend was told by a nurse at the QEH that she was taking up a bed from someone who really needed it, insinuating that her illness (anorexia) was her fault." Another participant had a friend with a similar hospital experience with EDs:

One of the doctors at the QEH told a close friend of mine that EDs are just ways of attention seeking and that they are just being stubborn. It seemed like a general lack of patience or understanding towards EDs.

Finally, one participant described the problematic issue of patient-blaming in EDs quite succinctly in her description of her own stigmatizing experience: "I was supposed to know how to take care of myself, and my eating should not be a problem."

The remaining 14% of stigmatizing experiences were a result of negative attitudes toward people who are overweight. The following response from one participant paints a discouraging picture of what it's like to obtain healthcare as an overweight person:

I am fat, therefore as soon as I see a physician about anything nutrition or eating-related, the attitude becomes exceptionally patronizing. It is incredibly frustrating. My weight is due to lifelong chronic health issues and life-sustaining medication. When I need assistance with altering diet or eating patterns to account for medication changes, I would like to receive it without a side of attitude.

This perspective is an important contribution to our study, as the ED-related responses so far have addressed anorexia, bulimia, and EDNOS more frequently than binge eating disorder and obesity in general. Binge eating disorder often goes unmentioned in the mainstream media's coverage of eating disorders, despite its increasing prevalence and damaging effects (Striegel-Moore & Franko, 2008).

While not all of the participants who reported experiencing stigma from healthcare professionals provided descriptions of these experiences, those who did provided important insight into the stigma that still exists with eating disorders. Many healthcare providers provide compassionate and effective care to their patients regardless of their presenting issue or illness. However, for some patients, it only takes one negative experience with a clinician to significantly alter the course of their treatment and prognosis. Several of our participants have described interactions with doctors who do not believe that eating disorders are serious illnesses, essentially dismissing patients' concerns and symptoms. In the most basic sense, this is a highly problematic way of managing patients who are exhibiting ED behaviors. Not treating EDs as concerns that merit medical attention can result in delaying treatment efforts, which has

implications on treatment outcome and long term ED prognosis (Currin et al., 2009; Lafrance-Robinson et al., 2013). Research consistently demonstrates that patients who begin treatment earlier in the course of their ED have higher recovery rates, lower relapse rates, and therefore lower mortality rates overall (Lafrance-Robinson et al., 2013; Linville et al., 2012). So while one doctor's misguided dismissal of an anorexia patient may seem like a small bump in the road, it may in fact have a profoundly negative impact on that patient's journey through eating disorder treatment.

A common theme in our results with this type of stigma, as well as the patient-blaming stigma discussed above, was the location and type of service at which the experience occurred. The majority of the participants who disclosed this information reported experiencing these attitudes at either the ER or a medical doctor's office. Family physicians, ER doctors, and nurses are often required to be generalists due to the varied patient population they treat, which may mean they have less foundational knowledge about EDs and are therefore more prone to stigmatizing attitudes. If this is the case, this information provides even more support for the need for increased ED education in both medical and nursing school.

Not Seeking Help When Help is Desired

In previous questions, participants responded to questions about their willingness to utilize services on PEI for ED-specific care, as well as questions about the experiences they and their loved ones have had in accessing these services. However, in order to include as many experiences as possible, we needed to inquire about instances where individuals may have felt they needed help for an eating disorder, but had, for some reason, not accessed it. In response to the question, "have you or someone close to you wanted to get help for eating disorders but NOT done so?", 20.5% of participants responded yes, and 79.5% said no. As previously mentioned,

when we take into account that 30.6% of participants reported either a diagnosed or self-identified eating issue in earlier survey questions, this suggests that two thirds of these students struggling with eating issues and disorders have not received any professional help. In the follow-up question that came next, some of these participants described why this is the case.

The 26 participants who chose to provide explanations for having not sought help for an eating disorder when they wanted provided reasons that were coded into 4 categories: stigma, feeling scared or afraid, being in denial that they had a problem, and the lack of ED treatment available in PEI. The majority of these individuals provided more than one reason or explanation, resulting in percentages that will add to more than a cumulative 100%. For example, the following participant's description described multiple issues that fall under the categories of stigma, denial, and lack of ED options on PEI:

People try to keep as much privacy as possible and something like this would cause quite a stir. At the time that I should have most sought treatment, I didn't know about ANY kinds of treatment that were available to me. Even if I had, I would have been in denial that there was a problem, if I was aware I would convince myself that it wasn't bad enough to get help, or I wouldn't want to talk about it at all.

As this participant illustrates, there can often be more than one factor at play with complex illnesses like eating disorders.

Of the participants who responded to this follow-up question, 42% mentioned stigma as a reason that they or their loved one had not sought treatment for their ED. These descriptions were mainly general, with statements such as: "stigma; don't want to be judged", "it's so personal and there's a lot of shame surrounding it", and "not comfortable bringing it up;

embarrassed”. One participant also cited the issue of potential stigma in the workplace if employers were to find out about their ED, as well as judgment about their role as a parent.

Another 42% cited fear as a reason for not having sought help for an eating disorder. Some of these participants described a general feeling of being scared, while others described it as a fear of treatment itself and what it might bring. Participants who reported a fear of treatment made statements indicating that they were “afraid of treatment (gaining weight)”, and “intimidated to open up to a stranger”. One individual reported a fear that the treatment itself would be inadequate: “The fear of or distaste for the ‘eat less, move more’ simplistic advice and resistance to referral to appropriate allied professionals (RD, psych).” Given the evidence that exists about the lack of empirically supported treatments being used by clinicians in Canada who treat eating disorders, the fear of ineffective treatment is not unfounded (Von Ranson, Wallace, & Stevenson, 2012). As well, the nature of eating disorders involves fear and anxiety surrounding food, and treatment involves the re-normalization of food and eating. It makes sense, then, that a fear of the food and weight-related aspects of treatment are anxiety inducing for sufferers, and this contributes to an initial resistance to treatment.

An additional 27% of these participants brought up the issue of the lack of ED-specific treatment options here on PEI, and past negative experiences attempting to get ED-specific assistance, as reasons that they did not seek help. One participant reported not having sought help due to the “lack of awareness and training among health professionals for the treatment of EDs, and because of past negative experiences (for treatment of eating issues and other mental health issues)”. Another participant, who focused on past negative treatment experiences as the reason for not having sought help since then, reported being “often told to just ‘monitor it’ or ‘eat more’ when it has come up in relation to anxiety/stress”. In line with our earlier discussion of the

underrepresentation of binge eating disorder, one participant said this: “I never know how to talk about binge eating. I feel I won’t be taken seriously.” Finally, 23% of the responses to this question addressed the potential denial of the ED as a problem as a reason for individuals not seeking treatment. This denial was described as “not looking at the eating as a problem”, not thinking it was “a big enough issue”, and individuals “not believing they needed help”. This effect is mirrored in ED research, which refers specifically to patients with anorexia experiencing periods of denial, and those with bulimia dealing with secretiveness and shame that delays treatment-seeking (Kaplan & Garfinkel, 1999). These cases in particular are fitting examples of the importance of physicians and mental health clinicians being well informed and able to recognize ED signs and symptoms. This is especially important for patients who are experiencing these illnesses that affect their ability to advocate for themselves.

Barriers to ED Care on PEI

In order to get a larger picture of the obstacles to receiving appropriate treatment for EDs on PEI, we asked participants the following question: “What, if any, barriers do you feel prevent or delay people from accessing/reaching out for help with eating issues on PEI?” Within the open-ended questions in our survey, this question had more responses than any other, with 134 participants providing descriptions. The barriers to Islanders for ED services were coded into 5 categories: shame, lack of services and knowledge of these services, stigma, denial or not wanting help, and lack of general awareness or understanding about EDs. The majority of participants cited more than one of these barriers in their responses.

Shame

Featured in 40% of participant responses to this question, shame was the most frequently reported barrier to getting help for EDs on PEI. This shame was further described as a result of

the gossip and lack of privacy often associated with small towns, which reveals some of the implications of life in Canada's smallest province when it comes to mental health issues. Many of these responses specifically referenced issues with confidentiality here on PEI. Descriptions of shame as a barriers included statements such as "lack of professionalism because of a close-knit community (i.e. sharing of information)", "embarrassment (everyone knows everyone)", and "shame, and the stiflingly closely linked community makes it more difficult to ensure privacy and support regarding mental health issues". Others described shame as a result of the judgment they feel exists with regards to EDs, saying things like "once word gets around you stop being a person and become a problem (disorder)", and "embarrassment for admitting they have a problem to others". The following participant summarized the issue of confidentiality on PEI succinctly with this response:

Because it is such a small island I believe people are afraid of getting help because they don't want anyone to know they had a problem to begin with and the risk of someone finding out is higher in small populations.

Unfortunately, the research indicates that this element of shame experienced by individuals with EDs does lead to underreporting, and is, by extension, a barrier to ED care (Kaplan & Garfinkel, 1999; Hoyt & Ross, 2003).

Stigma

A total of 33% of participants mentioned stigma in their descriptions of why Islanders delay help seeking for eating disorders. This stigma was described from a variety of perspectives, and participants reported stigma coming from both the general public and healthcare professionals. A common theme among the narratives was the patronizing nature of these stigmatizing attitudes. For example, one participant described the attitude of healthcare

professionals from whom they sought help with their ED in the following statement: “We’re supposed to know how to take care of ourselves, and a lot of people think if you’re not a stick, you’re not sick.” Still other participants described stigmatizing attitudes toward EDs in the general community, extending further than healthcare professionals. As one participant noted:

Negative reactions from friends and family; people don’t really see eating disorders as a mental issue. I think many people think it’s a choice; girls don’t eat because they want to be skinny, when really it is so much more complex than that.

Some participants raised the issue of stigma being particularly prevalent for certain demographics, with statements like “especially against male-gendered people”, and “binge eating doesn’t have as much stamina as anorexia or bulimia; it doesn’t seem as important”. This is especially problematic because these two subsets of individuals within the eating disordered population are already at higher risk for not seeking help. BED, despite its prevalence rates, is not given the same attention as anorexia and bulimia in part because it is associated with obesity and lack of control, resulting in sufferers feeling ashamed. Unfortunately research has shown BED sufferers to have the highest degree of impairment in their quality of life when compared with anorexia and bulimia patients (Doll, Petersen, & Stewart-Brown, 2004). Clearly, these individuals have significant obstacles to overcome even to obtain help with their ED without facing additional layers of stigma and negative attitudes. These participant descriptions should be interpreted with the knowledge that the self-selective and volunteer nature of our study prevents us from having a completely clear and objective understanding of these situations.

One participant in particular provided a simple but profound description of how far-reaching mental health stigma can be, with this response: “I also think that society looks at eating disorders as being less serious than they are.” Despite the fact that EDs have some of the highest

comorbidity, relapse, and mortality rates of all psychiatric illnesses, there is a lingering conviction in our society that those with EDs are either attention seeking or responsible for causing their own illnesses. For these and many other reasons, it is important to continue to shed light on the true nature of EDs and eradicate stigmatizing beliefs.

Lack of services & awareness of services

An additional 35% of responses cited a lack of available ED services as well as lack of awareness of existing services as reasons barriers to ED treatment on PEI. Some of these were basic descriptions, such as “not a lot of support here in PEI for people who suffer from these issues”, “not knowing that there are resources and people out there willing to help them”, and “with the lack of resources available people might not know what to do or how to take action”. Some, however, provided more detailed descriptions of the shortfalls of the PEI healthcare system when it comes to EDs. The following two responses addressed this issue.

Lack of resources maybe? Also a general lack of education for family doctors in the areas of mental disorders and their diagnosis. On PEI I feel that the family doctor is the first place people go seeking treatment or help with their mental health, so this becomes an issue with lack of education.

The lack of training and awareness among health professionals, as well as the fact that we have no eating disorder specialist on the island. Also, services (especially private counselors) are not promoted well enough; people do not know they exist.

Multiple participants mentioned the fact that PEI does not currently have a specialist in the field of EDs. The above quotes also touch on the lack of appropriate training for PEI’s generalists, such as family doctors, who inevitably receive these ED patients because there is no accessible specialist. One participant spoke to the potential effects of receiving care from professionals with

minimal ED experience, noting that “seeing a therapist who doesn’t understand can drive people away from the system and further into their disorder”. These responses are concrete examples of our earlier discussion about the importance of experience and expertise when treating EDs, as well as the need for enhanced ED training in medical schools. As well, many of these participants posited that Islanders are not aware of what options are currently available to them for help with an ED. Due to the lack of ED-specific services in the province, it is important that the mental health services that do exist are clear and straightforward about whether or not they are able to treat eating issues.

Lack of awareness and knowledge about EDs

15% of responses also discussed the lack of general awareness, knowledge, and understanding about EDs as barriers to care for PEI residents. One participant felt that the lack of discussion in high school about EDs and how to deal with them put students at a disadvantage, as this tends to be a high risk demographic when it comes to EDs. Many made general statements about the lack of public education and knowledge about EDs and the fact that there is very little public discourse about these issues. One participant said: “I do not feel that help for eating disorders has been widely advertised as much as other mental illnesses. And maybe people don’t realize that an ED is a mental illness.” Another described the effect that they perceived this lack of awareness to have had on their own ED journey: “I think that the general lack of awareness on the island is a really big problem. I feel like I could have sought help a lot sooner, had I been more aware of what was going on with me.” Fittingly, eating disorder awareness and understanding is closely tied to the issue of stigma: the more informed individuals are about EDs in general, the less likely they are to hold negative, stigmatizing attitudes toward ED sufferers. In working to remove one barrier, then, we are working to remove the other as well.

Denial and not wanting help

Finally, 25% of responses to this question mentioned denial and/or not wanting help as possible barriers to seeking help for EDs on PEI. These responses included statements such as “some people may not realize they need help”, “it’s hard for people to admit they have a problem”, and “they may feel like they aren’t that sick”. A few participants posited that some of this denial stems from the normalization of dieting in today’s society, in that “a lot of young girls don’t look at it as a problem”. One such individual said: “I think the main reason people don’t go is because they don’t think they have a problem. They believe it is normal to feel this because everyone, usually women, talk about weight loss, etc.” One need not look far to find examples of this dieting normalization in almost any environment. Magazines in grocery stores, fad diet ads on television, thinspiration photos and weight-loss solutions on the internet; the constant immersion in weight loss culture seems likely to have had an effect on our perception of extreme dieting. The line between “healthy” and “extreme” has become blurry in recent decades, and it follows, then, that individuals with EDs would have a hard time identifying their own eating behaviors as definitively unhealthy.

Another insight into the denial or reluctance to access treatment was provided by the following participant response: “Someone who has an eating issue might not want to get it fixed, because they started it for a reason in the first place.” This participant has touched on an interesting point. It is important to clarify the difference between the misconception that someone with an ED has “chosen” their illness, and the fact that despite them not having chosen it, it does serve a very real function in their lives that results in its persistent presence in the life of the sufferer. Those with anorexia, for example, often experience persistent anxiety, obsessive thoughts, and perfectionism, which are significantly reduced in their self-induced state of

starvation (Kaplan & Garfinkel, 1999; Kaye et al., 2003). So while this participant has not necessarily suggested that someone with an ED is choosing their illness, they have highlighted the fact that maintenance factors and the relief the ED behaviors provide can lead to the patient resisting treatment.

What Services Does PEI Need?

As the final question in the open-ended section of the survey, participants were asked the following question: what types of services/changes to services do you think could be helpful to have on PEI to facilitate people addressing their eating issues? Participant responses to this question were rich in detail, as the majority of them suggested multiple services or changes that would improve how EDs are handled on PEI. In terms of what PEI needs to improve ED services, the following categories emerged from the participants' suggestions, (percentage of responses that mentioned that category is in brackets):

- Awareness, about EDs in general and how/where to get help (44%)
- Eating disorder specialists and/or facilities (19%)
- Efforts to decrease shame and stigma (17%)
- Unsure and/or feel adequate services already exist (16%)
- Early education in schools, at all levels (13%)
- Better ED training for generalists and existing service providers (8%)
- Support groups and group therapy (7%)

As you can see from the categories above, participants provided a rather exhaustive list of suggestions, which they supported with thoughtful comments. This participant, for example, felt that awareness and early education in schools are important targets for improvement:

Make these places more known. When we learn about these disorders in class, get the teachers to talk more about the help centers because there may be someone in the class right then that doesn't know where to get the help. I think it would be beneficial to make these places known; more advertisements.

A similar response from another participant cited awareness as “the biggest problem. There isn’t enough of a focus on letting people know that help is available”. Many other responses made similar statements about the need for more awareness about existing services, with statements such as “need more info readily available”, and “more promotion and advertising for the help out there”. One participant took this a step further and suggested a possible solution for the issue of service awareness: “A division of the Mental Health Resource Roadmap could be devoted to listing potential resources and practitioners, especially those with experience with this type of issue.” This would be a seemingly simple way to provide direction within PEI’s mental health system toward the practitioners with ED experience and training.

Other participants who raised the issue of ED awareness spoke of the importance of awareness in general about what EDs are, who they affect, and so on. One individual emphasized the need for diversity in the ED public dialogue, noting that we must “show people that there are different types of eating disorders, not just anorexia and bulimia”. Another commented that the lack of discussion about EDs leads to the misconception that they are rare illnesses, observing that “people don’t seem to know the extent to which this affects people”. Yet another participant highlighted the need for a broader awareness of how serious EDs are in both their physical and psychological effects. As you can see, awareness was identified as a high priority issue when it comes to improving ED care on PEI.

Another suggestion that was mentioned often is the need for eating disorder specialists on PEI. These participants described this need with comments such as “need professionals who are specialized in eating issues”, “ED clinics are needed on PEI because this is an issue that’s a lot larger than anyone can comprehend”, and the impassioned “WE NEED AN EATING DISORDER SPECIALIST!” All of these responses mentioned clinicians who specialize in EDs, and several also mentioned the need for either a clinic or more extensive ED-specific inpatient options in PEI hospitals. One individual suggested “a fully developed mental health center with qualified staff trained in specialties”, while another proposed the hiring of more psychiatrists and registered dietitians with ED experience. Another participant suggested several specialized services that PEI would benefit from, such as “mentoring programs, telehealth conferences, online appointments, after hours clinics, community-based programs, and awareness campaigns”.

Many of these participants made more than one suggestion in their response. This quote is from a participant who identified ED specialists, better generalist training, and early education in schools as worthy priorities: “A specialist would be nice...but if not that, at least more training for the professionals we do have. And early intervention in the schools to deal with body image issues.” The issue of better training for family doctors and general therapists came up in multiple responses, as did early intervention within the school system. One participant spoke from personal experience on the latter:

High school guidance counselors having more experience with these eating issues, being available to the student in order to guide him/her to necessary help/treatment. In school is often where first symptoms of eating disorders are shown and where teenagers first feel comfortable seeking help. Personal experience with close friend.

This point is reminiscent of why it is important for family doctors to be well informed about EDs: they are often the first point of contact for patients. The same goes for guidance counselors, who are often the first mental health professional involved in a child or adolescent's developing ED.

Many participants mentioned stigma as another issue that needs to be addressed in order to improve PEI's existing services. Comments included statements like "understanding that it's a disease, not a personal flaw", "what needs changing are societal viewpoints", and "have a place where people can go without feeling judged for seeking help with eating issues". One participant spoke from personal experience about the problematic nature of stigma:

Less stigma, take it seriously and realize that eating disorders stem from a lot of different things such as depression, anxiety, internalized misogyny, etc. I feel that many people view women (and men) who have eating disorders as shallow and vain people, but that's not the case. I go through periods of starvation and stages of bingeing because I feel the need for control, not because I'm vain.

Still other participants expressed a desire for group-based treatment options for EDs on PEI, which is not something that is currently being provided. Some felt that these options would provide a sense of community, as well as alleviating the oppressive feeling of loneliness that can result from dealing with an illness that not often talked about openly. The remaining participants reported either being unsure of what sorts of changes need to occur for optimal ED services on PEI, or feeling that existing services are sufficient.

General Discussion & Conclusion

Prevalence & Help Seeking

As there is no current provincial data indicating the prevalence of EDs in the province of PEI, we were intrigued to discover that the prevalence of disordered eating within our volunteer UPEI sample, assessed using the EAT-26 screening tool, was consistent with the rates in the ED literature. Research shows an elevated prevalence of 8-17% when it comes to EDs in the university student population (Hoerr et al., 2002; Prouty et al., 2002). Our sample came out on the high end of that prevalence range, with 15.8% showing signs of significant disordered eating attitudes and behaviors. This finding indicates that there is a not insignificant number of UPEI students suffering from EDs. When we combine this knowledge with the fact that PEI had the third highest provincial rate of inpatient ED hospitalizations in the late 1990s, it seems that it would be beneficial to determine provincial prevalence rates, as EDs may be a significant local health concern currently flying under the radar. Indeed, the Standing Committee on the Status of Women released a report on EDs in 2014, wherein they included a recommendation addressing the importance of maintaining high quality data on these illnesses (House of Commons, 2014). This information is necessary in order for not-for-profit and community organizations to obtain financial support, as well as to inform practice with up-to-date, evidence based care. (House of Commons, 2014).

Unfortunately, our findings with respect to help seeking among students with EDs mirror the current literature as well, in that two thirds of participants whose eating behaviors were already suggestive of a an eating issue or disorder had not accessed services. In line with national findings as reported by the Standing Committee on the Status of Women, we also found there to be a discrepancy between the incidence of EDs that fit diagnostic criteria and the actual

incidence of disordered eating (House of Commons, 2014). Despite the fact that 30.6% of our participants reported either a diagnosed or self-identified eating issue, only 15.8% of participants scored in the eating disordered range on the EAT-26. This may be explained, in part, by the elevated instances of subclinical EDs in university student populations (Eisenberg et al., 2011; Wilfley et al., 2013). These subthreshold disorders may fall just below the “high score” category on assessment tools like the EAT-26, but have been shown to inflict almost identical levels of psychological distress and decreased quality of life as full-syndrome EDs. It is important, then, to understand and ameliorate the current barriers to accessing help for EDs within subthreshold individuals as well as those with clinical EDs.

Barriers to Accessing ED Care

Barriers to ED treatment are present all across Canada. In the 2014 report on EDs in the House of Commons, experts described gaps in care, limited access to treatment, and inappropriately long waiting lists for admission to ED programs (House of Commons, 2014). During this report, Dr. Blake Woodside of the Toronto General Hospital’s inpatient ED program summarized the obstacles and injustices faced by ED sufferers in Canada with this poignant quote:

If there were waits like this of four to six months for prostate cancer treatment, there would be a national outcry. There would be marches in the streets. The marches would be attended by middle-age men like me, but of course prostate cancer is a disease of middle-age men just like me, and older, so there is a clinic for prostate cancer in every hospital in this country. Compare that with the situation for anorexia nervosa where, in the province of Ontario... there are only three treatment centres that have in-patient beds for a population of 12 million. If this isn't discrimination, I don't know what is.

In line with this, there were several recurring theme that emerged as barriers to seeking and receiving effective ED care on PEI when we examined students' responses to our questions about specific local services.

Awareness about EDs in general

Perhaps the most frequently occurring theme in participants' responses was the general lack of awareness about EDs. They indicated a sense that the majority of PEI residents do not know enough about the nature of EDs, which impacts how these illnesses are seen and dealt with when they do surface within the community. For example, participants report that it results in stigmatizing attitudes as a result of stereotypical assumptions about EDs, underestimating the danger and severity of these illnesses, inability to recognize warning signs and symptoms in loved ones, as well as a lack of compassion towards individuals who suffer from EDs. In discussing the implications of this lack of awareness, some participants also suggested solutions that could be implemented in order to improve the situation going forward. Many expressed a desire for more education within the school system about healthy eating and the dangers of risky diet and exercise behaviors. Others described similar approaches to awareness and education, but with a larger target audience in order to include adults in the community. Promotion of awareness about these issues is essentially a prevention strategy of sorts. Not only does awareness increase the likelihood of early recognition of signs and symptoms, thereby increasing odds of early intervention, but it also contributes to the reduction of stereotypes and stigma within the general public.

In order to increase awareness within the university population, participants suggested ideas such as having informative pamphlets and posters available to students during the year, as well as included in the New Student Orientation week packages. Some students expressed a

desire to be able to access information through their residence support staff, while others suggested that a social media awareness campaign might be helpful. While UPEI does currently have a weeklong campaign to raise awareness for mental health issues in general, it may be beneficial to dedicate some aspect of that week to eating issues specifically. Anxiety and depression are often highlighted in mental health campaigns, leaving EDs and other specific diagnoses somewhat unaddressed. Given the specificity of EDs and their characteristics, as well as their elevated prevalence within the university student demographic, it seems prudent that they be given some more detailed focus rather than lumped in with anxiety and depressive disorders. Finally, due to the wide spectrum of severity when it comes to EDs, and the frequency of subclinical presentations in university EDs, it may be advisable to use a more inclusive term, such as “eating issues”, when it comes to awareness and education within this population.

Awareness of services

Another commonly cited theme as a barrier to ED care on PEI was a lack of awareness of local services. More than half of our sample had never heard of either of the two free, self-referring mental health centers, which are the Richmond Centre and Catholic Family Services. With respect to Catholic Family Services, the name appeared to cause a great deal of confusion, as it was often mistaken by participants as providing faith-based services, which it no longer does. It is possible that Richmond Centre’s name results in similar confusion, since the title of the center is not clearly associated with mental health.

However, the lack of awareness about these services is not attributable to names or titles alone. Several participants described a sense of confusion about where to look for ED services or assistance, with some of them even having searched and come up with minimal information. Upon performing these searches ourselves, we were faced with a similarly vague set of results,

often citing options in other provinces, or general locations in PEI such as the a hospital or the Richmond Centre. The problem with results like these is that the overwhelming majority of our participants expressed a desire for professionals who have ED-specific knowledge and experience if they were to seek help for an eating issue. Neither the hospital websites nor the Richmond Centre's information mentions EDs, or indicates that any clinicians providing treatment there have experience and training in providing care to this patient population. Through personal communications, we learned that while there are still no dedicated ED specialists practicing on PEI, the Richmond Centre does have 2 or 3 practitioners with a great deal of experience in the area of EDs. Despite the fact that it is the current policy of the Richmond Centre not to advertise their individual practitioners and the skill-sets they possess, it would seem useful to, at the very least, include information about the specific mental health concerns their clinicians have experience in dealing with. EDs are illnesses that are often misunderstood, and as you can see, stigmatizing attitudes are still prevalent within healthcare professionals. In light of this, it makes sense that individuals seeking help with eating issues would want reassurance that the treatment providers they select are ones who have experience with these disorders, and may, by extension, be more likely to provide nonjudgmental, compassionate care.

Lack of specialized services for EDs

Finally, another theme that appeared as a barrier in multiple questions and responses was the overall lack of specialized options and services for individuals seeking treatment for EDs on PEI. Many participants voiced significant concerns about the fact that not only does PEI not have a dedicated ED specialist within the mental healthcare system, the province lacks clinicians at all levels with the necessary expertise and experience to provide evidence-based ED treatment.

While we did learn that a few practitioners working at the Richmond Centre have a good deal of experience with ED issues, it was only through extensive networking by word of mouth that we were able to determine who these professionals were. Given that in the present day, the majority of searching for services of any kind is conducted online, it would be valuable to consider making the available options for ED care more accessible through online sources. However, in general, the options for individuals with EDs seeking treatment on PEI are extremely limited.

This lack of specialized options highlights the vital importance of ensuring that generalists on PEI have a sufficient knowledge base about EDs as to enable them to recognize the early signs of EDs, and make clinical decisions about the appropriate next step for patients. Evans et al. (2011) suggested that this could take the form of training programs for health professionals such as family and emergency physicians, with the goal of improving their skills in assessing and treating EDs. As we have seen, early intervention can be crucial for successful ED outcomes, which indicates that an ability to recognize and diagnose early stage EDs is an invaluable skill for clinicians to have.

ED education and awareness within non-specialist healthcare professionals is also an important factor in ensuring quality of care for sufferers. We read numerous participant descriptions of experiencing stigmatizing attitudes and discriminatory care from clinicians when they sought help for eating issues in PEI. In particular, we were disheartened to read multiple participants describing incidents in which they received derogatory, condescending remarks from doctors and nurses in ER settings that were intended to trivialize EDs as vain, attention-seeking issues. While it is possible that the negative attitudes and sometimes despicable actions taken by these clinicians are simply a result of a lack of education and understanding about EDs, there is never a “good” reason for providing low quality care. Further complicating these issues is the

fact that many PEI residents do not currently have a family doctor, which is problematic given that, due to the lack of local ED specialists, family doctors tend to be the first point of contact in obtaining ED treatment.

In their descriptions of the issue of non-specialists' lack of awareness and understanding of EDs, participants voiced a strong desire for generalists to receive additional education and training on these illnesses. The need for better generalist ED education is one that is well documented in the current literature. Many experts recommend that there be wider dissemination of information about up to date research on EDs, such as biogenetic etiological factors, warning signs, at-risk populations, and screening measures (Crisafulli et al., 2008; Evans et al., 2011). Screening measures are particularly relevant for generalist clinicians to utilize and understand, as they increase the likelihood of identifying EDs in their early stages (Eisenberg et al, 2011). In fact, for university counselors in particular, some research suggests that it would be prudent to adopt routine screening practices, due to the abnormally high prevalence rates within that demographic (Quick & Byrd-Bredbenner, 2013).

If ED awareness can reduce stigma in the general population, then surely it can have a similar effect within the healthcare profession. Awareness has many components: awareness about EDs in general, about how to recognize the signs and what to do, where to go to access effective care, and how to provide appropriate, evidence-based treatment to ED patients. It is crucial that each component receive the attention it deserves from both research and healthcare professionals, because each time we address and shed light on a new aspect of these illnesses, we move one step closer to the goal of handling eating disorders with informed and compassionate care.

Appendix A

PARTICIPANT INFORMATION LETTER

You have been invited to participate in a research project on UPEI students attitudes toward eating and knowledge of supports for eating issues conducted by Natalie Sullivan under the supervision of Dr. Stacey MacKinnon in the Department of Psychology at the University of Prince Edward Island. This study is being conducted to fulfill the requirements of Psychology 490: Honours Thesis.

The purpose of this research project is to better understand UPEI students' positive and negative attitudes toward eating and their awareness of the availability and accessibility of treatment options for people with eating "irregularities".

Participation in this project will take approximately 15-30 minutes of your time, and your participation in the research project will pose no harm to you. Your participation in this online survey is entirely voluntary. You may stop your participation in the research project at any time, without penalty or prejudice. Should you choose, your name will be entered into a draw for \$50. All information collected in the course of this project will remain confidential and anonymous, and you will not be able to be identified from any of your responses. Only Natalie Sullivan and Dr. Stacey MacKinnon will have access to the data resulting from this research project. All data resulting from the research project will be retained for a period of five years after the completion of the project, after which time it will be destroyed.

If you have any questions or concerns about this research project, you may consult with Dr. Stacey MacKinnon, ph. (902) 566-0402, email: smackinnon@upei.ca or Dr. Colleen MacQuarrie, Chair of the Department of Psychology, ph. (902) 566-0617, email: cmacquarrie@upei.ca. For access to the full results of the research project once these are available, please contact Dr. Stacey MacKinnon, ph. (902) 566-0402, email: smackinnon@upei.ca

This research project has been approved by the Research Ethics Committee of the Department of Psychology, as a subcommittee of the UPEI Research Ethics Board. Any concerns about the ethical aspects of your involvement in this research project may be directed to Dr. Stacey Mackinnon, Chair of the Ethics Committee, Department of Psychology, telephone (902) 566-0402, e-mail: smackinnon@upei.ca

Appendix B

PARTICIPANT CONSENT FORM

I consent to participating in research on: UPEI students attitudes toward eating and knowledge of supports for eating issues

I understand that my participation involves: Participating in a 15-30 minute online survey about my feelings toward eating.

I have read and understood the material about this study in the Information Letter, and understand that:

1. My participation in the study is entirely voluntary;
2. I may discontinue my participation at any time without any adverse consequence;
3. My responses will be kept confidential and anonymous, except where the researcher is required by law to report them;
4. Once all data have been submitted and identifiers removed, I will no longer have the opportunity to request that my data be removed from the study;
5. I have the freedom not to answer any question included in the research;
6. I may have a copy of the signed and dated consent form to keep.

This research is being conducted by Natalie Sullivan for Psychology 490: Honors Thesis, under the supervision of Dr. Stacey MacKinnon. Any questions or concerns about this study can be directed to Dr. Stacey MacKinnon, ph. (902) 566-0402, email: smackinnon@upei.ca

This research has been approved by the Research Ethics Committee of the Department of Psychology, as a sub-committee of the UPEI Research Ethics Board. Any concerns regarding your involvement in this study may be directed to Dr. Stacey Mackinnon, Chair of the Research Ethics Committee, Department of Psychology, telephone (902) 566-0402, email: smackinnon@upei.ca.

Participant's name (please print):

Participant's signature:

Date: ____ / ____ / ____

Appendix C

See Eating Attitudes Test (EAT-26)

Garner et al. 1982, *Psychological Medicine*, 12, 871-878.

Appendix D

Online Survey Questions

Age: _____

Sex: _____

Height: ____ ft ____ inches

Current Weight: _____ lbs

Highest Weight (excluding pregnancy): _____ lbs

Lowest Adult Weight: _____ lbs

Ideal Weight: _____ lbs

Do you have a good understanding of healthy eating principles? Yes ____ No ____

How often do you engage in at least moderate physical activity each week?
____ every day ____ 5-6 days ____ 3-4 days ____ 1-2 days ____ rarely

What activities do you engage in most often? _____

Do you think that you should be more active? Yes ____ No ____

Are you or have you ever been considered an “elite” or “competitive” athlete?

____ YES I am currently ____ YES I was in the past but am not currently ____ NEVER

IF YES, in what sport(s)? _____

Do you eat every 2 – 3 hours throughout the day? Yes ____ No ____

Do you eat the following foods each day?

7-8 servings of fruit and vegetables YES ____ NO ____ SOMETIMES ____

6-8 servings of grain products YES ____ NO ____ SOMETIMES ____

2-3 servings of dairy YES ____ NO ____ SOMETIMES ____

2-3 servings of meat, fish or alternatives (e.g., tofu) YES ____ NO ____

SOMETIMES ____

Do you follow a particular approach to eating (e.g., Paleo, vegetarian, gluten-free, diabetic, Weight Watchers, low-carb etc....) ____ YES I do currently ____ YES I have in the past but do not do so currently ____ NEVER

If YES, what program(s) do you follow?

Has your weight changed by more than 5 pounds in the last year? YES, it has gone up _____
 YES, it has gone down _____ NO it hasn't _____

If YES, approximately how much has your weight changed? _____ lbs

The second questionnaire participants will complete is the Eating Attitudes Test (Garner et al, 1982)

Do you think you have an issue with eating?

- NO
 MAYBE
 I THINK SO BUT HAVEN'T BEEN DIAGNOSED
 YES, I HAVE BEEN DIAGNOSED WITH ANOREXIA NERVOSA
 YES, I HAVE BEEN DIAGNOSED WITH BULIMIA NERVOSA
 YES, I HAVE BEEN DIAGNOSED WITH BINGE EATING DISORDER
 YES, I HAVE BEEN DIAGNOSED WITH EATING DISORDER NOT OTHERWISE SPECIFIED (EDNOS)

Which of the following have you heard of and/or used **in connection with eating disorder information and/or treatment?**

UPEI Student Services (student counselling, student health clinic psychiatrist):

- haven't heard of them
 heard of them never used them
 used them myself
 know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Richmond Centre:

- haven't heard of them
 heard of them, never used them
 used them myself
 know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Catholic Family Services:

- _____ haven't heard of them
- _____ heard of them, never used them
- _____ used them myself
- _____ know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Queen Elizabeth Hospital Unit 9 Inpatient Psychological Services, Charlottetown:

- _____ haven't heard of them
- _____ heard of them, never used them
- _____ used them myself
- _____ know someone who has used them

If you haven't heard of them OR have heard of them but have not used them would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Queen Elizabeth Hospital Emergency/Outpatients, Charlottetown:

- haven't heard of them
- heard of them, never used them
- used them myself
- know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES NO

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Therapist in Private Practice with specialization in eating issues (e.g., psychologist, social worker etc...):

- haven't heard of them
- heard of them, never used them
- used them myself
- know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES NO

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Therapist in Private Practice with no specialization in eating issues (e.g., psychologist, social worker etc...):

- haven't heard of them
- heard of them, never used them
- used them myself
- know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Family Doctor

_____ haven't heard of them

_____ heard of them, never used them

_____ used them myself

_____ know someone who has used them

If you haven't heard of them OR have heard of them but have not used them, would you consider doing so in future if you or someone you know had issues with eating?

YES _____ NO _____

If NO, why not? _____

If you or someone you know has used this service, what was the experience like? _____

Have you or anyone close to you experienced any negative attitudes or stigmas from professionals when trying to access help for eating issues?

_____ YES _____ NO

If YES, what were they? _____

If you or someone close to you has eating issues and has wanted to seek help but has NOT done so, why is that? _____

Do you feel there are any barriers to people accessing/reaching out for help with eating issues on PEI? If so, what are they?

What types of services do you think could be helpful to have on PEI to address these issues?

Do you think eating issues/disorders information should be included as part of New Student Orientaton? YES NO

Do you think eating issues/disorders information should be included as part of UPEI Mental Health Week? YES NO

What do you think would be the most effective way of communicating to UPEI students information about eating issues and the available treatment options? What approaches do not appear to work with undergraduate students?

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Arcelus, J., & Button, E. (2007). Clinical and socio-demographic characteristics of university students referred to an eating disorders service. *European Eating Disorders Review, 15*(2), 146-151. Retrieved from <http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2007-04866-007%26login.asp%26site%3dehost-live%26scope%3dsite>
- Aspen, V., Weisman, H., Vannucci, A., Nafiz, N., Gredysa, D., Kass, A. E., . . . Taylor, C. B. (2014). Psychiatric co-morbidity in women presenting across the continuum of disordered eating. *Eating Behaviors, 15*(4), 686-693. doi:10.1016/j.eatbeh.2014.08.023
- Bannatyne, A. J., & Abel, L. M. (2015). Can we fight stigma with science? the effect of aetiological framing on attitudes towards anorexia nervosa and the impact on volitional stigma. *Australian Journal of Psychology, 67*(1), 38-46. doi:10.1111/ajpy.12062
- Bardone-Cone, A. (2012). Examining the match between assessed eating disorder recovery and subjective sense of recovery: Preliminary findings. *European Eating Disorders Review, 20*(3), 246-249. doi:10.1002/erv.1123
- Becker, A. E., Hadley Arrindell, A., Perloe, A., Fay, K., & Striegel-Moore, R. (2010). *A qualitative study of perceived social barriers to care for eating disorders: Perspectives from ethnically diverse health care consumers*. United States, North America: Wiley Subscription

Services, Inc., A Wiley Company. Retrieved from
[http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dedbas%26AN%3dedbas.ftpubmed.oai.pubmedcentral.nih.gov.3020364%26site%3dedslive%26scope%3dsite](http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dedbas%26AN%3dedbas.ftpubmed.oai.pubmedcentral.nih.gov.3020364%26site%3dedslive%26scope%3dsite)

Bunnell, D. W., Shenker, I. R., Nussbaum, M. P., Jacobson, M. S., & Cooper, P. (1990). Subclinical versus formal eating disorders: Differentiating psychological features. *International Journal of Eating Disorders*, 9(3), 357-362. Retrieved from
[http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d1990-28694-001%26login.asp%26site%3dehost-live%26scope%3dsite](http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d1990-28694-001%26login.asp%26site%3dehost-live%26scope%3dsite)

Carter, P. I., & Moss, R. A. (1984). Screening for anorexia and bulimia nervosa in a college population: Problems and limitations. *Addictive Behaviors*, 9(4), 417-419.
doi:10.1016/0306-4603(84)90045-5

CBC PEI. (2013). Eating disorder training dated, doctors worry. Retrieved from
<http://www.cbc.ca/news/canada/prince-edward-island/eating-disorder-training-dated-doctors-worry-1.2288022>

Clarke, M. G., & Palmer, R. L. (1983). Eating attitudes and neurotic symptoms in university students. *The British Journal of Psychiatry*, 142, 299-304. Retrieved from
[http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d1984-12311-001%26login.asp%26site%3dehost-live%26scope%3dsite](http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d1984-12311-001%26login.asp%26site%3dehost-live%26scope%3dsite)

- Crisafulli, M. A., Von Holle, A., & Bulik, C. M. (2008). Attitudes towards anorexia nervosa: The impact of framing on blame and stigma. *International Journal of Eating Disorders, 41*(4), 333-339. doi:10.1002/eat.20507
- Currin, L., Waller, G., & Schmidt, U. (2009). Primary care physicians' knowledge of and attitudes toward the eating disorders: Do they affect clinical actions? *International Journal of Eating Disorders, 42*(5), 453-458. Retrieved from <http://www3.interscience.wiley.com/journal/121589485/abstract>
- Doll, H. A., Petersen, S. E., & Stewart-Brown, S. (2005). Eating disorders and emotional and physical well-being: Associations between student self-reports of eating disorders and quality of life as measured by the SF-36. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation, 14*(3), 705-717. Retrieved from <http://www3.interscience.wiley.com/journal/121589485/abstract>
- Doninger, G. L., Enders, C. K., & Burnett, K. F. (2005). Validity evidence for eating attitudes test scores in a sample of female college athletes. *Measurement in Physical Education and Exercise Science, 9*(1), 35-49. doi:10.1207/s15327841mpee0901_3

Dooley-Hash, S., Lipson, S. K., Walton, M. A., & Cunningham, R. M. (2013). Increased emergency department use by adolescents and young adults with eating disorders.

International Journal of Eating Disorders, 46(4), 308-315. doi:10.1002/eat.22070

Eating disorders among girls and women in Canada (2014). . Ottawa, CA: Canada. Parliament.

House of Commons. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=edscl%26AN%3dedscel.245269%26site%3ded-live%26scope%3dsite>

Eisenberg, D., Nicklett, E. J., Roeder, K., & Kirz, N. E. (2011). Eating disorder symptoms

among college students: Prevalence, persistence, correlates, and treatment-seeking. *Journal of American College Health*, 59(8), 700-707. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh%26AN%3d2011-25535-003%26login.asp%26site%3dehost-live%26scope%3dsite>

Evans, E. J., Hay, P. J., Mond, J., Paxton, S. J., Quirk, F., Rodgers, B., . . . Sawoniewska, M. A.

(2011). Barriers to help-seeking in young women with eating disorders: A qualitative exploration in a longitudinal community survey. *Eating Disorders: The Journal of Treatment & Prevention*, 19(3), 270-285. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh%26AN%3d2011-08626-005%26login.asp%26site%3dehost-live%26scope%3dsite>

Family struggling with PEI mental health service shortage. Retrieved from

<http://www.cbc.ca/news/canada/prince-edward-island/family-struggling-with-mental-health-service-shortage-1.2649155>

- Girz, L., Lafrance Robinson, A., & Tessier, C. (2014). Is the next generation of physicians adequately prepared to diagnose and treat eating disorders in children and adolescents? *Eating Disorders: The Journal of Treatment & Prevention*, 22(5), 375-385.
doi:10.1080/10640266.2014.915692
- Goss, K., & Allan, S. (2014). The development and application of compassion-focused therapy for eating disorders (CFT-E). *British Journal of Clinical Psychology*, 53(1), 62-77.
Retrieved from
<http://proxy.library.upei.ca/login?qurl=http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2014-07106-004%26login.asp%26site%3dehost-live%26scope%3dsite>
- Griffiths, S., Mond, J. M., Murray, S. B., & Touyz, S. (2015). The prevalence and adverse associations of stigmatization in people with eating disorders. *International Journal of Eating Disorders*, 48(6), 767-774. doi:10.1002/eat.22353
- Gucciardi, E., Celasun, N., Ahmad, F., & Stewart, D. E. (2004). Eating disorders. *BMC Women's Health*, 4, S21-6. doi:10.1186/1472-6874-4-S1-S21
- Herzog, D. B., Dorer, D. J., Keel, P. K., Selwyn, S. E., Ekeblad, E. R., Flores, A. T., . . . Keller, M. B. (1999). Recovery and relapse in anorexia and bulimia nervosa: A 7.5-year follow-up study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(7), 829-837.
doi:10.1097/00004583-199907000-00012
- House, J., Schmidt, U., Craig, M., Landau, S., Simic, M., Nicholls, D., . . . Eisler, I. (2012). Comparison of specialist and nonspecialist care pathways for adolescents with anorexia

nervosa and related eating disorders. *International Journal of Eating Disorders*, 45(8), 949-956. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-31194-006&login.asp?site=ehost-live&scope=site>

Hoyt, W. D., & Ross, S. D. (2003). Clinical and subclinical eating disorders in counseling center clients: A prevalence study. *Journal of College Student Psychotherapy*, 17(4), 39-54.

Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2003-08942-005&login.asp?site=ehost-live&scope=site>

Johnson, C. L., Lund, B. C., & Yates, W. R. (2003). Recovery rates for anorexia nervosa. *The American Journal of Psychiatry*, 160(4), 798-798. doi:10.1176/appi.ajp.160.4.798

Kapelos, V. (2014). Top doctor sounds alarm on lack of treatment for eating disorders. Retrieved from <http://globalnews.ca/news/1569023/top-doctor-sounds-alarm-on-lack-of-treatment-for-eating-disorders/>

Kaplan, A. S., & Garfinkel, P. E. (1999). Difficulties in treating patients with eating disorders: A review of patient and clinician variables. *The Canadian Journal of Psychiatry / La Revue Canadienne De Psychiatrie*, 44(7), 665-670. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1999-11767-002&login.asp?site=ehost-live&scope=site>

Kaye, W. H., Barbarich, N. C., Putnam, K., Gendall, K. A., Fernstrom, J., Fernstrom, M., . . .

Kishore, A. (2003). Anxiolytic effects of acute tryptophan depletion in anorexia

nervosa...including commentary by attia E. *International Journal of Eating Disorders*, 33(3), 257-270 14p. Retrieved from <http://proxy.library.upei.ca/login?qurl=http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dc8h%26AN%3d106697112%26site%3dedslive%26scope%3dsite>

Kirk, G., Singh, K., & Getz, H. (2001). Risk of eating disorders among female college athletes and nonathletes. *Journal of College Counseling*, 4(2), 122-132. doi:10.1002/j.2161-1882.2001.tb00192.x

Lafrance Robinson, A., Boachie, A., & Lafrance, G. A. (2013). “i want help!”: Psychologists’ and physicians’ competence, barriers, and needs in the management of eating disorders in children and adolescents in canada. *Canadian Psychology/Psychologie Canadienne*, 54(3), 160-165. Retrieved from <http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2013-15542-001%26login.asp%26site%3dehost-live%26scope%3dsite>

Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Brown, A. P., Cautin, R. L., & Litzman, R. D. (2013). The research–practice gap: Bridging the schism between eating disorder researchers and practitioners. *International Journal of Eating Disorders*, 46(5), 386-394. Retrieved from <http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2013-16604-002%26login.asp%26site%3dehost-live%26scope%3dsite>

Linville, D., Brown, T., & O'Neil, M. (2012). Medical providers' self perceived knowledge and skills for working with eating disorders: A national survey. *Eating Disorders: The Journal*

of Treatment & Prevention, 20(1), 1-13. Retrieved from
<http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2011-30093-001%26login.asp%26site%3dehost-live%26scope%3dsite>

Mancuso, S. G., Newton, J. R., Bosanac, P., Rossell, S. L., Nesci, J. B., & Castle, D. J. (2015). Classification of eating disorders: Comparison of relative prevalence rates using DSM-IV and DSM-5 criteria. *The British Journal of Psychiatry*, 206(6), 519-520.
doi:10.1192/bjp.bp.113.143461

Marciano, D. A., McSherry, J. A., & Kraus, A. S. (1988). Abnormal eating attitudes: Prevalence at a canadian university. *Canadian Family Physician*, 34, 75.

Mathe, N., Van, d. M., Agborsangaya, C. B., Murray, T., Storey, K., Johnson, J. A., . . . Johnson, S. T. (2015). Prompted awareness and use of eating well with canada's food guide: A population-based study. *Journal of Human Nutrition and Dietetics*, 28(1), 64-71.
doi:10.1111/jhn.12222

Mintz, L. B., & Betz, N. E. (1988). Prevalence and correlates of eating disordered behaviors among undergraduate women. *Journal of Counseling Psychology*, 35(4), 463-471. Retrieved from
<http://3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d1989-05730-001%26login.asp%26site%3dehost-live%26scope%3dsite>

Norris, M., Strike, M., Pinhas, L., Gomez, R., Elliott, A., Ferguson, P., & Gusella, J. (2013). The canadian eating disorder program survey - exploring intensive treatment programs for youth with eating disorders. *Journal of the Canadian Academy of Child & Adolescent Psychiatry*,

22(4), 310-316. Retrieved from

<http://proxy.library.upei.ca/login?qurl=http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3da9h%26AN%3d91812258%26site%3dedslive%26scope%3dsite>

Peck, L. D., & Lightsey, O. R. J. (2008). The eating disorders continuum, self-esteem, and perfectionism. *Journal of Counseling & Development, 86*(2), 184-192. doi:10.1002/j.1556-6678.2008.tb00496.x

Prouty, A. M., Protinsky, H. O., & Canady, D. (2002). College women: Eating behaviors and help-seeking preferences. *Adolescence, 37*(146), 353-363. Retrieved from <http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2002-17571-009%26login.asp%26site%3dehost-live%26scope%3dsite>

Quick, V. M., & Byrd-Bredbenner, C. (2013). Disturbed eating behaviours and associated psychographic characteristics of college students. *Journal of Human Nutrition & Dietetics, 26*, 53-63. Retrieved from <http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3ds3h%26AN%3d88287155%26site%3dedslive%26scope%3dsite>

Reinking, M. F., & Alexander, L. E. (2005). Prevalence of disordered-eating behaviors in undergraduate female collegiate athletes and nonathletes. *Journal of Athletic Training, 40*(1), 47-51. Retrieved from <http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2005-03889-001%26login.asp%26site%3dehost-live%26scope%3dsite>

Satir, D. A. (2013). The role and meaning of eating disorder therapist experience level.

Psychotherapy, 50(4), 570-572. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2013-03961-001&login.asp?site=ehost-live&scope=site>

Shisslak, C. M., Crago, M., & Estes, L. S. (1995). The spectrum of eating disturbances.

International Journal of Eating Disorders, 18(3), 209-219. doi:10.1002/1098-

108X(199511)18:3<209::AID-EAT2260180303>3.0.CO;2-E

Smink, F. R. E., van Hoeken, D., Oldehinkel, A. J., & Hoek, H. W. (2014). Prevalence and

severity of DSM-5 eating disorders in a community cohort of adolescents. *International*

Journal of Eating Disorders, 47(6), 610-619. doi:10.1002/eat.22316

Södersten, P., Bergh, C., & Bjönström, M. (2008). Prevalence and recovery from anorexia

nervosa. *The American Journal of Psychiatry, 165*(2), 264-265.

doi:10.1176/appi.ajp.2007.07091409

Stewart, M., Keel, P. K., & Schiavo, R. S. (2006). Stigmatization of anorexia nervosa.

International Journal of Eating Disorders, 39(4), 320-325. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-04938-007&login.asp?site=ehost-live&scope=site>

Striegel-Moore, R., & Franko, D. L. (2008). Should binge eating disorder be included in the

DSM-V? A critical review of the state of the evidence. *Annual Review of Clinical*

Psychology, 4, 305-324. doi:10.1146/annurev.clinpsy.4.022007.141149

- Sullivan, P. F. (1995). Mortality in anorexia nervosa. *The American Journal of Psychiatry*, *152*(7), 1073-1074. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=dcmedm%26AN%3d7793446%26site%3ded-live%26scope%3dsite>
- Taylor, C. B., Bryson, S., Luce, K. H., Cunniff, D., Doyle, A. C., Abascal, L. B., . . . Wilfley, D. E. (2006). Prevention of eating disorders in at-risk college-age women. *Archives of General Psychiatry*, *63*(8), 881-888. doi:10.1001/archpsyc.63.8.881
- Thompson-Brenner, H., Satir, D. A., Franko, D. L., & Herzog, D. B. (2012). Clinician reactions to patients with eating disorders: A review of the literature. *Psychiatric Services*, *63*(1), 73-78. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=dpsyh%26AN%3d2012-17663-014%26login.asp%26site%3dehost-live%26scope%3dsite>
- Vanderlee, L., BSc, McCrory, C., MSc, & Hammond, D., PhD. (2015). Awareness and knowledge of recommendations from Canada's food guide. *Canadian Journal of Dietetic Practice and Research*, *76*(3), 146-149. Retrieved from <http://search.proquest.com.proxy.library.upei.ca/docview/1709992621?accountid=14670>
- Vohs, K. D., Heatherton, T. F., & Herrin, M. (2001). Disordered eating and the transition to college: A prospective study. *International Journal of Eating Disorders*, *29*(3), 280-288. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=dpsyh%26AN%3d2001-00665-004%26login.asp%26site%3dehost-live%26scope%3dsite>

- Von Ranson, K. M., Wallace, L. M., & Stevenson, A. (2013). Psychotherapies provided for eating disorders by community clinicians: Infrequent use of evidence-based treatment. *Psychotherapy Research, 23*(3), 333-343. doi:10.1080/10503307.2012.735377
- White, S., Reynolds-Malear, J., & Cordero, E. (2011). Disordered eating and the use of unhealthy weight control methods in college students: 1995, 2002, and 2008. *Eating Disorders: The Journal of Treatment & Prevention, 19*(4), 323-334. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psy&AN=2011-14823-003&login.asp&site=ehost-live&scope=site>
- Wilfley, D. E., Agras, W. S., & Taylor, C. B. (2013). Reducing the burden of eating disorders: A model for population-based prevention and treatment for university and college campuses. *International Journal of Eating Disorders, 46*(5), 529-532. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psy&AN=2013-16604-032&login.asp&site=ehost-live&scope=site>
- Williams, M., & Leichner, P. (2006). More training needed in eating disorders: A time cohort comparison study of canadian psychiatry residents. *Eating Disorders: The Journal of Treatment & Prevention, 14*(4), 323-334. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psy&AN=2006-10849-005&login.asp&site=ehost-live&scope=site>
- Zhao, Y., & Encinosa, W. (2006). Hospitalizations for eating disorders from 1999 to 2006: Statistical brief #70. *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs*, Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=dcmedm%26AN%3d21510032&site=deds-live&scope=site>