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#TwentyFirstCenturyRecovery:
Embracing Wellness, Self Management, and the Positive Interface of Eastern and Western Psychology.

Post-Chartered Doctoral Research Portfolio. (D.Psych.)

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June, 2014.
THE FOLLOWING PART OF THIS THESIS HAS BEEN REDACTED FOR DATA PROTECTION/CONFIDENTIALITY REASONS:

pp 112-132: Section C. Case study: Solution focused brief therapy as applied to bulimia nervosa.

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pp 187-189: Hospital anxiety and depression scale. Taken from Acta Psychiatria Scandinavica 67, pp 361-370
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Submitting a piece of work of this gravity is rarely, if ever, a solo effort. It requires supporting parties from all corners in order to successfully come to fruition. For this reason, I would like to thank all concerned, who very kindly made this research possible.

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A final word of thanks goes to my Mum, who remains a shining source of inspiration, support and encouragement to me everyday. Thank you for being the kindest, most resilient person I know. I’m truly blessed to have you as my mother.
Declaration:

I grant powers of discretion to the Department of Psychology to allow this thesis to be copied in whole or in part without any reference to me. This permission covers only single copies made for study purposes, subject to the normal conditions of acknowledgment.

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Denise O’Dwyer.
SECTION A

“The study of cripple, stunted, immature and unhealthy specimens, can yield only a cripple psychology and a cripple philosophy. The concept of creativeness and the concept of the healthy, self-actualizing, fully human person, seem to be coming closer and closer together and may perhaps turn out to be the same thing.” (www.maslowquotes.com)

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The above quote, as referenced by Abraham Maslow, perhaps epitomises the confounding theme of this entire research portfolio: that of the evolving, creative self, within a twenty-first century recovery backdrop.

Background/Inception of Research:

As someone who began her professional career in Psychology, with the (perhaps learned) consciousness, that there was simply ‘no other way’ than Clinical Psychology, my focus and direction have changed considerably over the years. This has been influenced by many factors. Initially, I was perhaps forced to consider other alternatives, coming from the school of clinical hard knocks. Thereafter however, other diverse influences informed my counselling psychology preference. Counselling Psychology addresses the emotional, social, work, school and physical health concerns people may have at different stages in their lives (www.apa.org). It is this holistic essence which initially sparked my interest in the area, and has continued to shape and inform my perspective over the years, including the present portfolio research interest. I have been greatly influenced by many writers, orators, practitioners, artists, researchers (whether fictionally or in person), all of whom have stimulated my thinking and practice. Being in a position where I have access to a variety of clients, has led to a practical understanding of the diversity of people, and perhaps safeguarded against my adopting a ‘one size fits all’ approach. I work with clients on the basis of their individualised value systems, assisting each to overcome their unique obstacles, whilst striving to achieve established goals in a supportive environment. Counselling Psychology, I believe appropriately captures this aspirational umbrella effect,
whilst in the present portfolio, coherently formulates the client empowerment theme running throughout.

**Structure and Summary Content :**

The present Portfolio is divided into three sections. The primary research component (Section B) examines and evaluates the effectiveness of Wellness Recovery Action Planning (WRAP) with an Adult Mental Health and Acquired Brain Injury population. The second component (Section C), investigates the effectiveness of Mindfulness based therapies in the treatment of Binge Eating Disorder and Bulimia Nervosa, via Critical Review. The third component (Section D), presents a Client Case Study, which explores Solution Focused Brief Therapy (SFBT) coupled with Person Centredness in treating a client with Bulimia Nervosa.

The mixed methods approach evident throughout this portfolio, is linked through the over-riding Recovery theme. Deegan(1988) purported that the role of recovery is not to become normal, but rather to embrace the human vocation of becoming more deeply and fully human. This holds resonance within the field of Counselling Psychology, which proposes a similar holistic philosophy. The themes thus explored in this research relate to client empowerment, self management, positive psychology and wellness, and are largely developed in the first person narrative. This is to emphasise the mixed methods approach, which emanated from personal involvement in the evaluation and implementation of professional practice, as well as formal objective research. Thus, whilst the objective nature of the research requires a measure of dispassionate consideration, it also offers practical aspects of my work as a WRAP Group Facilitator (Section B), Professional Therapist (Section D) and Scientific Research Practitioner (Section C).

WRAP interfaces on many levels with SFBT in relation to its trust in the client’s inherent ability to recover, the relative focus on client strengths, and the unconditional positive regard in the face of client progress or regression. Mindfulness as applied in the context of bulimia, is one of the third generation behavioural therapies, and similarly operates on a personal responsibility and compassion led basis. As is the case in WRAP and SFBT,
Mindfulness is a functional and transferrable approach, which in recent times is receiving recognition as a worthy alternative to CBT, for those with whom CBT has proven ineffective.

I was initially prompted to research the area of Recovery, following completion of Wellness Recovery Action Planning (WRAP) training. WRAP offered a new and promising paradigm towards self management, and daily maintenance of wellbeing (Copeland, 1997). Although appearing to lack somewhat empirically, I was nevertheless inspired by its simple, holistic, client centred approach. WRAP consolidated much of what I believed to be true on a personal and professional level. It also appeared to practically support many of the concepts purported by Counselling Psychology; an example being trust in the client’s implicit expressed requirements for their unique recovery journey, as distinct from directing anything prescriptive.

Although I was clear with regard to the overall theme and subject matter of my research, each section evolved gradually and spontaneously. From the initial seedling of evaluating WRAP with a mental health population, to the inclusion of a comparative ABI sample, and respective wait-list control groups, my intention was to examine the relative effectiveness of WRAP. My Case Study simultaneously emanated while facilitating WRAP groups. I received a private referral for a client with a ten year history of Bulimia, a limited time frame with which to work, and a reported unimpressive history of long-term, regressive psychotherapy. I had at this point noted (albeit superficially) the benefits of WRAP with my research participants. I had also observed the parallels of it, and Solution Focused Brief Therapy (SFBT) with respect to assisting people towards meaningful, personalised goals in a timely and focused manner. In fulfilling the requirements of LCU, to offer a common thread throughout this portfolio, I set about combining the Humanistic Approach, with the tools of SFBT to inform my case therapeutic sessions. During the fourth and fifth sessions, aspects of Mindfulness were exploratively introduced. The client responded well, reporting that mindful eating was both a novel and effective means of “slowing things down” as well as providing temporary alleviation of impulsivity around food. My Critical Review was thus born, informing the final strand of my mixed methods, recovery led approach.
Summary of Wellness Recovery Action Planning (WRAP)

As a practicing Counselling Psychologist, with a Person Centred-Positive Psychology led approach, I was drawn to the cutting-edge solution focused perspective of WRAP. Appointing the client as the recovery protagonist, with medical professionals and carers occupying ancillary, supportive roles, WRAP shares similarities with Solution Focused Brief Therapy (SFBT) (as detailed in Section C). As with SFBT, WRAP offers a positive orientation, towards identifying barriers as well as solutions to client problems, within a specified timeframe. The fundamental belief, that the client is the expert on his/her recovery journey, is essentially what distinguishes WRAP to other previous theories. WRAP is a peer-supported approach to self management and recovery, in which participants identify internal and external resources for facilitating recovery, using these tools to create their own individualised plan for successful living (Copeland, 1997).

WRAP as applied to the Present Study (Section B).

The findings of this research gave noteworthy significance to the benefits of WRAP (See Appendix 1). WRAP identifies and promotes self awareness, self management, and self empowerment, through management of symptoms, identification of triggers, self advocacy and relapse prevention. My WRAP participants included mental health clients, and an acquired brain injury (ABI) sample. In the case of mental health, there was a limited number of previous studies. However, those recorded indicated promise (e.g. Higgins, Callaghan, deVries, et al., 2010; Starnino, Mariscal, Holter, et al., 2010). In the case of ABI and WRAP, there was a distinct paucity of research, with little evidence of even a single previous empirical study. The introduction of WRAP to such previously unchartered waters thus enabled me to examine the effectiveness of the intervention with both groups, as well as contributing a novel ABI dimension to WRAP, and recovery findings in general.

The results yielded impressive outcomes for WRAP participants, with an observed overall reduction in Depression and Anxiety post WRAP participation. Despite the indicated success of this study however, as well as positive outcomes alluded to in previous mental health
evaluations, certain service providers appear reluctant to adopt the practices advocated by WRAP and other self-management programmes. WRAP challenges the traditional system of thinking, as well as shifting the balance of power in favour of the client (Hill, Roberts, 2010). Previous, more prescriptive approaches, favoured the service provider as being the ‘expert’ in charting the progress and recovery of the client. The recovery model however, shuns the medical model of mental illness, favouring instead the psychosocial perspective on mental illness and its humanistic ideology (Fisher, 1994). Evidently this presents potential risks for the service provider, e.g. risk of harm to self, risk of harm to others, and not without reason. Within its current format therefore, WRAP may be viewed as operating within the structures of ‘WRAP with the appropriate wrapping’. This is progress nonetheless, and a further step forward, towards more fully embracing the recovery model.

Case Study (Section C):

Davidson (2005) suggested that WRAP has the potential to be applied to any condition, including substance abuse, depression and various other mental health conditions. In keeping with this theme, I chose my case study to demonstrate how recovery principles, particularly those of self management and client empowerment, may be applied within any therapeutic context. The presenting client had an ongoing struggle with Bulimia, and had not responded to previous, long term psychotherapy. I wished to examine whether Bulimia, normally treated with Cognitive Behaviour Therapy (Fairburn, 2008) could be approached using Solution Focused Brief Therapy (SFBT). SFBT holds a particular resonance for me, namely the personal strengths focus which marries well within my overall Recovery theme. Like Wellness Recovery Action Planning (WRAP), Solution Focused Brief Therapy (SFBT) belongs to the constructionist school, where therapy becomes a dialogue. This enables both partners to identify the problem, and simultaneously construct a solution (Friedman, 1993). It also appeared a timely opportunity to examine and evaluate my work as a Psychologist, combining the basic humanistic Rogerian principles of empathy, congruence and unconditional positive regard (Rogers, 1951), with the positive, goal oriented approach of SFBT.
SFBT proved partially successful in meeting my clients’ goals. This indicates that where time is limited, and the client has perhaps not responded well to previous, more traditional approaches, SFBT is worthy of consideration. In this incidence, the SFBT method was coupled with Roger’s humanistic principles (Rogers, 1951) as well as aspects of Mindfulness Based Therapy and CBT (diary recording). Although positive change occurred, both in client symptom management and symptom severity, she was not fully ‘recovered’ in the traditional sense. In the twenty-first century sense however, she was on the recovery track, with positive steps forward as well as setbacks, accepted as part of the recovery course. One particular recommended strategy which proved surprisingly beneficial was that of Mindfulness. This informed the basis of my Critical Review.

Critical Review (Section D ):

Self directed therapy was chosen for my Critical Review, having observed my client’s responsiveness to the practice of mindfulness as a way of managing her Bulimic symptoms. Mindfulness, as applied to Binge Eating Disorder (BED) and Bulimia Nervosa (BN) was this time, the focus of attention. According to Telch, Agras & Linehan (2001), as many as half of individuals seeking treatment for BED, do not benefit from the traditionally preferred CBT. Mindfulness in such instances may offer a twenty-first century alternative.

Similar to Solution Focused Brief Therapy, Mindfulness focuses on strengths as opposed to limitations, which is a more empowering way forward, than some of the more traditional psychotherapeutic approaches (Malzfeldt, 2013). Mindfulness also bears semblance to Wellness Recovery Action Planning, also underscored by a Solution focused, Positive Psychology framework. Mindfulness cultivates self-acceptance and compassion, qualities that may disrupt the cycle of distress over-eating, negative emotions, and harsh self-recrimination that is common in compulsive and binge-eating behaviours (Gongora, Derksten & van Der Staak, 2004). In becoming more consciously aware, individuals may become empowered to work with and develop wiser, more balanced relationships with their eating behaviours, food choices, their bodies and ultimately, themselves.
based interventions may therefore hold promise in addressing disordered eating patterns (Baer, Fischer & Huss, 2006; Kristeller, Baer & Quillan-Wolever (2006)) within twenty-first century recovery.

Summary Conclusion:

The notion of Recovery has recently taken centre stage in guiding mental health policy and practice. It is not yet clear what the term actually means, and what is involved in transforming the nation’s mental health system to promote it. Some of the concerns listed by service providers in relation to fully adopting the recovery model, include the following: Recovery oriented care adds to the burden of already stretched providers, it is neither reimbursable nor evidence based, recovery oriented care devalues the role of professionals, and increases providers’ exposure to risk and liability (Davidson, 2005). While these are legitimate concerns, they are not a reason for abandonment or disengagement from recovery based principles. We will observe throughout this portfolio, that recovery and self management practices (e.g. WRAP, Mindfulness, SFBT) appear at the cutting edge of future healthcare service provision. While it is important not to dispense completely with the old, we must also embrace and incorporate the new. This research provides preliminary, significant evidence, that WRAP and other self management, recovery oriented programmes, are a worthy source of attention and consideration. Future empirical studies are required to provide further corroborative evidence to this effect, thus inspiring future generations as well as service providers to invest, take measured risks, and jump on the bandwagon of twenty-first century recovery.
References


www.apa.org
An examination of Wellness Recovery Action Planning (WRAP) within a Twenty First Century Recovery context.

ABSTRACT
Wellness Recovery Action Planning (WRAP) is a self management system, designed to enable individuals develop a range of effective strategies for self-directed care. The present study evaluated the effectiveness of WRAP on the Depression and Anxiety levels of Adult Mental Health, and Acquired Brain Injury groups. This was measured via The Hospital Anxiety and Depression Scale (HADS), pre and post WRAP intervention. Waiting list control groups were included. Knowledge of Recovery was investigated using the Mental Health Recovery Measure (MHRM), while knowledge and application of WRAP was measured via the adapted Copeland scale. Results indicated significant, affirmative evidence in respect of each measure, suggesting initial support for the use of WRAP with both populations. Between-group differences were not observed, and WRAP uptake was no superior for either group. Results are discussed within the overall context of twenty-first century recovery, and implications for future practice.
Chapter 1 : Introduction

Introduction and General Impetus:

“Many of the skills required to manage their lives and their emotional distress can be acquired once people begin to believe in their own capacity to recover, to develop self belief. Self managed care may include a range of strategies; including holistic remedies, spirituality, physical exercise, creativity, medication….People can see how to protect themselves better and begin a kind of practice of natural protection. I am talking about the ordinary things people tend to do when they have a good life….some of the things you may take for granted – like being kind to yourself, getting enough rest, getting some exercise, eating nutritious food, having little treats, having fun. What is extraordinary is that for many people with a mental illness, seeing the importance of these things is a kind of revelation. They are something which have to be learned how to be done, and then done almost self consciously, until they become second nature.” (Leibrich, 1999: ‘A Gift of Stories’).

In writing this thesis, my most fundamental aspiration, was to demonstrate the potential of self-empowerment as well as the discernment of appropriate supports, in recovering from any illness. The concept of Recovery has taken on new meanings in recent years that emphasise personal empowerment and de-emphasise traditional medical definitions which focused on the absence of psychopathology (Bellack, 2006; Deegan, 1988; Mead & Copeland, 2000; Ridgway, 2001). Whilst past emphasis on diagnosis and repair has offered much in terms of insight and understanding of mental ill-health, more recent focus on developing and maintaining ‘psychological wellness’, holds imminent potential as well as curious promise. The concept of ‘wellness’ is quite a recent term in the literature. It was used by Cowen (1991) to describe an optimal state of being, that exists along a continuum. Essentially the challenge for individuals, is to identify factors or conditions, which advance or inhibit their wellness and recovery.
Whether we choose to view recovery as a destination point at which one eventually arrives, or an ongoing journey in which the necessary steps are taken to ensure daily reprieve, the individual and subjective nature of recovery make the concept difficult to operationalise and/or define. Slade (2009) helpfully separates ‘clinical’ and ‘personal’ recovery. Clinical Recovery may be viewed as recovery ‘from’ mental illness, and includes the alleviation of symptoms and a return to ‘premorbid’ functioning. Personal Recovery on the otherhand, is where being ‘in recovery’ means living a meaningful life even if mental health problems persist (Anthony, 1993). For the purpose of the present study, Anthony’s (1993) conceptualisation perhaps best fits as a working definition.

To demonstrate this, I have chosen to examine the effectiveness of Wellness Recovery Action Planning (WRAP) (Copeland, 1997) within the contexts of acquired brain injury (ABI) and mental health. WRAP is a twenty-first century peer-supported recovery tool and may be applied to any condition, including depression, substance abuse and various other mental health conditions. (Davison, 2005)

Rationale:

My reasons for choosing these specific sample populations were many. Firstly, it made pragmatic sense, since the majority of my work centres around ABI and Mental Health. It was thus convenient as well as practical for me to approach these more readily accessible populations. Secondly, as I work in the areas of Adult Mental Health and ABI, I was especially interested in undertaking evaluative research with both populations. As enjoined by the Codes of Professional Ethics of the Psychological Society of Ireland (PSI) and the British Psychological Society (BPS), Professional Psychologists are required to systematically review and evaluate the effectiveness of their work, thus informing another valid reason for my research. I was similarly enthusiastic to review my work as a certified WRAP facilitator, having completed the required Copeland Institute WRAP training. In so doing, I was hopeful that results of my evaluation, might yield interesting between-group effects, as well as offering promising data to the organisation in which I work and funders alike.
More laterally, my reason for investigation was that WRAP appeared quite ‘cutting edge’ as an area for evaluative research. Recovery, recovery principles and recovery tools are informing and changing the shape of health service delivery world-wide, WRAP being one suggested tool, which has been generating a massive surge of media interest. Internationally, Slade (2009) proposed that WRAP was the most popular self-management tool for maintaining positive mental health, while Cook, Copeland, Hamilton, et al., (2009) reported ongoing WRAP initiatives in 50 states of the U.S. In England, Hill et al., (2009) reported extensive use of WRAP while McIntyre (2005) highlighted its use in New Zealand. Cook, Copeland, Corey, et al., (2010) proposed WRAP as fast becoming the intervention of choice in the U.S. and internationally. Across Ireland, radio programs, national newspapers, supplemental health magazines, were all similarly purporting the health benefits of WRAP. It appeared as though the promise of identifying personal obstacles on the road to recovery, as well as having a clear strategy for achieving and maintaining positive mental health, was attracting nationwide attention. Ireland was indeed, ready to WRAP!

The organisation in which I work, ‘National Learning Network’ (NLN), was quick to observe this interesting new trend. They were enthusiastic about staff receiving the relevant training (from the Copeland Centre, U.S.A.) in order to commence implementation of WRAP at the earliest possible convenience. Private organisations similarly jumped on the band wagon, each becoming trail-blazers in developing in-house as well as publicly accessible WRAP training sessions. In 2008, St. Patrick’s University Hospital, Dublin established the first dedicated Wellness and Recovery Centre, which is underpinned by WRAP principles and staffed by trained WRAP facilitators. (No formal evaluations of this work could be located for the purpose of the present study).

With this increasing media attention, combined with what appeared to be the newest, most popular WRAP ‘buzz word’ at the organisation in which I work (NLN), my curiosity was irreversibly spiked. As a Scientist Practitioner, it led to my questioning the relative scientific, evidence base of WRAP. Initial investigation of the literature suggested that reported studies on WRAP were scarce and very few in number, and even less employed objective
evaluation methods of assessment. While there appeared to be a large and growing body of beneficial anecdotal reports (Copeland, 2012), WRAP appeared largely under-researched (Hill, Roberts & Igbrude, 2010). Fukui, Starnino, Mariscal et al., (2011) undertook the first evaluation of WRAP, which employed a comparison group and follow-up measurement. Cook et al (2009) and Starino et al., (2010) were similarly among the documented few who employed objective measures to demonstrate the effectiveness of a WRAP intervention.

In Trinity College Dublin, Professor Agnes Higgins and colleagues, in conjunction with The University of Nottingham and the Counselling Institute of Ireland, spearheaded an exploratory study on WRAP (Higgins et al., 2010). The research involved an evaluation of WRAP, for a group of mental health service providers, called The Irish Mental Health and Recovery Consortium (IMHREC). Similar to the above, findings positively supported the use of WRAP in creating relative changes in people’s knowledge, skills and attitudes towards recovery. The study however did not include a control group for comparison, which further led me to develop my research concept, by way of control group inclusion and focus on symptomatology reduction. In considering all of the aforementioned, my WRAP research was thus born.

**Proposed Research Structure :**

Since WRAP occupies a potentially significant position within the overall multifaceted context of twenty-first-century Recovery, I will begin with the old adage of “It is necessary to look back in order to move forward”. The overall context, history, and significance of our Recovery journey as a nation, as well as within the field of Psychology, is both pertinent and relevant to our understanding of how things have evolved over time. I will attempt therefore, to offer a brief history, as well as an outline of the relevant factors, concepts and ideas which have both positively and negatively influenced and shaped the progression of Recovery, to the present day. This will inform a natural progression to the important recovery concept of Self Management, from which WRAP has emerged. The Present Study will be introduced by way of what comprises a WRAP intervention, and subsequently what
the study proposes to examine within this context. Relevant literature will be examined under the criteria of what has or hasn’t been effective to date. This will occur within the contexts of Adult Mental Health and Acquired Brain Injury, paying particular attention to how WRAP may or may not offer, newly enhanced recovery potential.

**History and Recovery in context:**

Positive psychology is the science of what is needed for a good life (Slade, 2010). Long before positive psychology however, the great philosophers (Socrates, Plato, Aristotle) and psychological thinkers (Freud, Jung, Adler, Frankl, Rogers, Maslow) articulated theories of the good life, pleasure, wholeness, purpose, health and actualization (Duckworth, Steen & Seligman, 2005; Ryff, 2006). Maslow (1970) concluded that striving toward self-actualization, growth and excellence is a universal human tendency and overarching life purpose, while Adler (1927/1954) noted the importance of holism in understanding the individual. He proposed, “it is always necessary to look for.....reciprocal actions of the mind on the body, for both of them are parts of the whole with which we should be concerned” (Ansbacher & Ansbacher, 1967, p. 255).

Martin Seligman, the psychologist and architect of learned helplessness theory (Seligman, 1975), proposed that Psychology had 3 missions: 1) Curing mental illness 2) Making the lives of all people more fulfilling and 3) Identifying and nurturing high talent. 50 years later, Seligman expressed his disapproval that the field had been hijacked into focusing on weakness and damage. While acknowledging the importance of this, Seligman (1998) re-emphasized the simultaneous study of strength and virtue as being of equal if not greater importance. As President of the American Psychological Association (APA), he articulated that his objective for his term was to focus the profession on the scientific study of wellbeing (Seligman, 1998). In a theoretical continuum, with severe mental illness on the left and optimal human thriving on the right, a hypothetical distribution of individuals populates a bell curve of illness and wellbeing. Seligman pointed out that previous research had focused on the left half of the curve and that the right side of the curve, populated by individuals in good health who are thriving, had mostly been neglected. Recognizing that there is more to mental health than the absence of mental illness, positive psychology (in
which Recovery essentially has its grass roots) is dedicated to the rigorous scientific study of “strengths, well-being...optimal functioning” (Duckworth, Steen & Seligman, 2005, p. 631) and flourishing (Keyes & Haidt, 2003). It follows that treatment is not just about fixing what is broken, but also nurturing what is best.

The move in Western societies, from the construction of people with mental health problems as ‘mad’, having knowledge that others did not, and living alongside people in their communities, to ‘having a mental illness’ which needed to be treated by doctors and segregated in asylums, happened at the end of the 18th century (Foucault, 1988). Foucault (1965) and others (Scull, 1981) documented how people with mental illnesses, were treated as sideshow freaks during their confinement in jails and poor houses throughout the early days of the asylum. During this period, people with mental illnesses were for the most part, in Borges’ terms, ‘wondered at’ (Borges, 1972). In fact, tickets were sold to the gentry who wanted to spend their Sunday afternoons travelling out to the countryside to stare, gawk, and muse over the “insane” in their rags, chains, cages, and otherwise stable-like accommodations. During the year 1815 for example, Foucault (1965, p. 68) estimated that there were 96,000 Sunday visits to Bethlehem Hospital alone, for which each visitor paid a penny to see the “lunatics” exhibited by hospital staff.

Ordinarily, we like to believe that these dark days in the history of psychiatry, along with the equally dark days of the 150 years of institutionalisation that followed, came to an end with the downsizing and closure of large state hospitals. Moving people from institutional care to community living came about in the 1960s due to a change in attitude towards the ethically and morally questionable segregation of ‘mental patients’ from society, advances in efficacy of psychotropic medication, and a political impetus to close expensive psychiatric hospitals (Newnes, Holmes & Dunn, 1999). However, whether it is because the resources and supports necessary to meaningfully include people with mental health problems were not sufficiently put in place, or because of prevailing negative attitudes and stigma toward this group had not been fully considered, many believe that service users are in many ways still ‘institutionalised in the community’ (Carr, 2008).
Despite the best intentions of deinstitutionalisation, Davidson, Stayner et al (2001), suggest that people with severe mental illnesses from the 1950s, instead entered into a period in which they were required to succeed, in order to have their dreams for more dignified lives in the community, fulfilled. In essence this means that individuals are required to be in remission from the symptoms of their illness, before being granted access to normative adult activities, such as living independently, being gainfully employed, completing education, or having mutual, caring relationships (Davidson, Staynor, Nickou, et al, 2001). Personal experiences with various community programs would indeed suggest, that people are expected to be non-psychotic prior to gaining access to a job or returning to school, and to demonstrate skills such as good money management, before being afforded the opportunity of living alone in independent accommodation. Such an infinite list of ‘have to’s’ thrown before people, prior to reaching some elusive ideal of ‘normality’, would appear to make community integration difficult, if not impossible. Davidson & Strauss, (1992; 1995) propose that such ‘an ideal’ is indeed one that most people, who have never experienced psychiatric problems would struggle to reach. It seems that while community programs offer a fate better than being stared at through bars by wide-eyed children, this is hardly aspirational, and unlikely to have been the dream of the deinstitutionalization legislators, nor that of people with mental illness.

Coinciding with a move to community integration, there came about a positive change in the conceptualisation of longer term outcomes for people with serious mental illnesses. The Kraepelinian (1913) view of ‘chronic schizophrenia’ as people inevitably experiencing a progressive downhill course, eventually ending up demented and incompetent, was challenged. A longitudinal study by Courtney Harding (1987) provided an empirical basis for the concept of recovery from serious mental illness via psychosocial rehabilitation. Researchers in Vermont and Switzerland followed several hundred adults with severe mental illness for over thirty years. If Kraepelin was right, the majority of these people should have ended up on the back wards of state hospitals. Instead, research discovered that between half to almost two-thirds of the samples no longer required hospitalization, were able to work in some capacity, and lived comfortably with family or friends (Harding, 2002). Harding’s work along with others, gave testimony to the positive effects of
considering mental illness from a psychosocial perspective. She and others challenged the belief that severe mental illness is chronic and that stability is all one can hope for. They discovered that there are multiple outcomes associated with severe mental illness and that many people indeed progressed beyond a state of mere stability. Recovery had begun to signal a revolution in mental health services, clearly demonstrating potential in the life course of people with severe mental illness. The concept of recovery thus began to obtain legitimacy (Sullivan, 1997).

The Recovery Movement:

The Recovery Movement begun in the 1970s, when small groups of ex-patients, fuelled by a shared sense of anger and a hope of inciting change, formed in the United States. The struggle was always political, with its proponents fighting for the rights of people with mental illness (Chamberlin, 1995). The groups were influenced by the black, gay and women’s liberation movements of the time. Non-patients were excluded from the organisations, as consumers found that their radical views on mental illness were not shared by practitioners or the general public.

These groups practiced consciousness-raising to combat the internalised stigma that they confronted. The major principles of the movement included empowerment, self-help and advocacy, promoting a vision of people with mental illness as functioning in the world as opposed to progressively deteriorating. Empowerment refers to an individual’s evolution from “passive service recipient” (Chamberlin, 1990) to taking an active role in one’s mental health care. The concept of self-help presented a means for empowerment through seeing oneself differently and interacting with the world in new and productive ways, while advocacy involved taking personal responsibility in advocating for the rights of all affected by mental ill-health. These terms were to become the mainstays of Recovery terminology and the Recovery Model as we understand it today.
**The Recovery Model:**

The two key features of the recovery model are its psychosocial perspective on mental illness and its humanistic ideology. The recovery model shuns the medical model of mental illness, in which illness is defined, diagnosed and treated by an expert, and is seen as a defective chemical mechanism in the patient’s brain that needs to be repaired (Fisher, 1994). Within this context, the medical model assumes the consumer as a passive recipient of expert care.

By contrast, the recovery model is based on a system of health promotion in which individuals actively define their needs and collaborate with others in their healing process. The individual is considered not in the context of an illness as such, but rather in the context of a unique psychosocial experience (Fischer, 1994). From the psychosocial perspective, the importance of the individual’s social role, and the extent to which it is interrupted by mental illness is highlighted by the recovery model. Accordingly, recovery must include the development of supports to help in re-establishing one’s social role, along with the development of self-management skills (Fischer, 2008).

The other key feature of the Recovery Model relates to its humanistic perspective. The Humanistic approach to psychiatric treatment emerged from existential philosophy. Spaniol & Koehler (1999) proposed, “the goal of recovery is to become more deeply human” (p.410). They argued that one of the main benefits of utilising recovery is that it allows us to look at the whole person, in all of his or her humanity, instead of just at their illness” (p.410). This notion of humanity that is so intrinsic to recovery is inextricably linked to the humanistic ideology. This ideological paradigm sees worker and consumer in a relationship that is above all human, and views the human condition that is common to everyone, as what allows the two to connect. Anthony (2000) offered that consumers hold the key to their own recovery, and the role of professionals as one of facilitating this recovery.
This calls to mind the theories and work of Carl Rogers, from which I have been gratefully inspired and curiously influenced throughout my professional career (as illustrated throughout this portfolio). Rogers (1951) believed that inside everyone, there exists an “organismic valuing process”, an ongoing innate process whereby experiences are accurately valued according to whether or not they are good or bad for the individual. Almost seventy years later, and this is essentially the message of WRAP; foster the good and surrender the bad. Rogers was similarly a proponent of Person Centred Therapy, which similar to Anthony’s above suggestion (Anthony, 2000), identifies consumers as being the keyholders to their recovery, whilst therapists facilitate the process. Rogers (1942) advocated a non-directional approach of allowing clients to explore their difficulties as they wish.

In conceptualising the above, it is evident how in every field of research, everything holds its particular time of significance. Old ideas become new, and later again, new ideas become old. Impressions, insights and further supporting evidence all serve to shape our understanding and perspectives, providing us with an increasing knowledge and corresponding wealth of experience. The challenge with Recovery is that it is still a largely subjective experience. We can infer only what works and what does not, based on the observation, study and research of individuals. Nevertheless, just as history changes from one era to the next, so too does the experience of recovery differ from one individual to another.

**Defining Recovery**

Although there appears to be a general consensus nowadays, that recovery is an important concept, both for service users and mental health services alike (International Review of Psychiatry (2012); Journal of Mental Health (2012)), there remains much confusion around its definition. Who is recovery for? What does it look like in practice for people who use services? How does it impact on services themselves? (Farkas, 2007; Slade, Amering & Oades, 2008).
Recovery, by nature and course, resists being reduced to a single professional definition, which for some scientist-practitioners may prove problematic. Consumers on the other hand remain less concerned with finding a suitable definition, maintaining focus instead on finding helpful treatments and empowering the users of mental health services (Ridge, 2009). Slade (2009) separates the terms ‘clinical’ and ‘personal’ recovery. Clinical recovery locates itself within the medical mental health literature. It is operationalised by sustained remission of symptoms, a return to premorbid ‘normal’ functioning, and is the same for everyone (Lieberman & Kopelowicz, 2002). Personal recovery on the other hand, emerged from the service user movement in the United States in the 1980s, and maintains a more individualised focus. Anthony (1993) described personal recovery as living a meaningful life even in the presence of persisting mental health problems, while Kartalova-O’Doherty et al, (2010) described recovery as an open-ended, gradual and individual process that involves the reconnection with self, others and time.

Within this personal recovery context, rather than being drawn to rational, objective and scientific forms of thinking, people prefer to understand their health conditions (and lives for that matter) as stories involving characters, events, motivations and meaning (Gold & Ridge, 2001). Recovery is often seen as a journey through life, as distinct from an outcome at which one arrives. It is not about ‘getting rid’ of problems, but rather seeing people beyond their problems – their talents, abilities, possibilities, goals, dreams, interests. It is about re-claiming social roles and relationships that will help support one’s better self, and disposing of those which do not. Deegan (1988) purported that the role of recovery is not to become normal, but rather to embrace the human vocation of becoming more deeply and fully human.

The Transtheoretical Model developed by Prochaska and DiClemente (1982) with subsequent revisions (Ridgway & Press, 2004), is useful in conceptualizing the individuality as well as non-linear nature of recovery. Recovery is seen as involving making progress, losing ground, and pressing forward again (Anthony, 1993; Crowley 2000). The reality of people’s stage in the change process, as well as their diversity of needs, values, preferences
and stated goals, informs the various service options and relevant recovery supports (Onken, Craig, Ridgway, et al, 2007).

**Recovery in Policy:**

The World Health Organisation (WHO) declares that health is “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 2004). However, creating health-oriented rather than illness-oriented services has proved rather more difficult than the clarity with which this declaration would suggest. While efforts to generate a science of illness, as well as established and validated interventions to treat and manage such illness has been very successful, this has not been mirrored by equivalent advances in applying the science of well-being within health services (Slade, 2010).

The literature indicates that promotion of recovery has been adopted as a declared aim of mental health policy internationally (Department of Health UK 2001; Mental Health Commission New Zealand, 2001; Department of Health and Children, 2006; Scottish Executive, 2006; Government of South Australia, 2010; Jacobson & Curtis, 2000). Recovery-oriented practice it appears, has been adopted at least on a theoretical level, across the world (Anthony, 1993; Slade, Armering, M. & Oades, 2008). Quite what is meant by recovery in these different settings is however, difficult to define with any degree of specificity.

In Ireland, this year marks the seventh year of the publication of ‘A Vision for Change’ (Department of Health and Children (DOHC), 2006) which outlined a blueprint for radical change to the mental health system. The policy emphasised the need for a paradigm shift, from a largely biomedical model to one of recovery orientation, focusing treatment on people in the community (DOHC, 2006). Progress in implementing policy outlined in this vision has been slow, and is not being helped by the current economic situation.
Organisations such as Irish Mental Health Coalition (IMHC), Shine – supporting people affected by mental ill-health and Amnesty International (AI), continue to champion the need for mental health reform in this country, emphasising empowerment, partnership and community based care.

In the UK, policy initiatives have similarly called for recovery-oriented practice to be the guiding light for mental health services (Department of Health, 2007, 2009, 2011), thus re-orienting services to support the personal recovery of service users. In “Discovering Hope for Recovery from a British Perspective” (Allott & Loganathan, 2002), the concept of Recovery was described as “only just beginning” to be recognised. Similarly, ‘The USA President’s New Freedom Commission on Mental Health’ (2003) attempted to bridge the gap between evidence based practice and a vision of recovery. It began its report with a mission statement… “We envision a future when everyone with a mental illness will recover….a future when everyone with a mental illness at any stage in life has access to effective treatment and supports – essentials for living, working, learning and participating fully in the community” (p. 1). The report concluded that the mental health system was “not oriented to the single most important goal of the people it serves – the hope of recovery” (p. 3). So with the correct visions, policies etc. in place, how do we advance from a position of merely conceptualising recovery to one of fully embracing, activating and standardizing its mission?

Scotland is offered as an example of a country where incorporation of recovery into mental health practice has been at least partially successful (Smith-Merry, Freeman & Sturdy, 2011). As a succession of policy documents show, Scottish mental health policy has increasingly embraced the concept of recovery over the past five years (Scottish Executive, 2006; Scottish Government, 2008). To the extent that such policy initiatives have been successful in changing the orientation and practices of the mental health services, has been accomplished through the dissemination of a series of ‘recovery technologies’’. These refer to various types of techniques, practices and instruments that embody the values of recovery, and provide a means of enacting such values within the mental health system, e.g.
Approaching Recovery – Twenty-First Century Style:

“Your time is limited, so don’t waste it living someone else’s life. Don’t be trapped by dogma – which is living with the results of other people’s thinking. Don’t let the noise of others’ opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition, they somehow already know what to do.” (Jobbs, 2005).

This now infamous quote, taken from the Stanford University commencement speech by the late Steve Jobbs, was made while addressing a group of graduate students. While not specifically contextualised within the field of mental health or mental illness, the speech nonetheless, conveys one of the most important aspects of maintaining positive mental health and wellbeing for everyone: Self Management. Many of the skills required to manage their lives and their emotional distress can be acquired once people begin to develop self belief, to believe in their own capacity to recover (Davidson, 2005).

A major theme held by the proponents of recovery, includes a belief that mental health consumers can achieve a wide array of recovery-related life goals. These include goals that are primarily psychological (e.g. discovering hope, finding meaning and purpose, becoming empowered, establishing a positive self-identity, and symptom reduction), as well as goals related to improved community integration (Bond, Salyers, Rollins, et al, 2004). This entails consumers taking a greater role in decision making, self-care and self management.

Self care and Self Management:

People with psychiatric diagnoses have countless ways of “getting on with their lives” (Allott, Loganathan & Fulford, 2002), so although the concept of recovery from a mental
illness is relatively new (Deegan, 1988), people with mental health difficulties have been self-managing and functioning in the community long before the idea of recovery became popularized (Harding et al, 1987).

Self management is another aspect of recovery which translates the ideas of recovery into practical tools of everyday living. It involves a broad set of strategies which assist individuals in managing their illness, taking action, facing problems and making choices. Self-managed care strategies are as varied as the people themselves, however some common techniques include writing down or talking about problems, contacting or visiting with friends, exercising, praying/meditating, creative endeavours, practicing good nutrition, and engaging in self advocacy (Rogers & Rogers, 2004). For many, voluntarily taking psychotropic medications and using formal services are aspects of self-managed care as well. (www.mentalhealthrecovery.com/wrap).

The essence of self management is having what New Zealand recovery researchers call, “agency” (Walsh, 1999), i.e. believing that one can control, or at least influence, the circumstances of one’s life. Agency or Self Management is therefore a key element in the narratives of individuals seeking recovery. In fact, it often appears integral to the most dramatic turning point in someone’s recovery journey, signifying the moment where an individual ceases to be a victim of circumstance or control, instead becoming the master of his/her own destiny. At such critical times, individuals may indeed be observed to “cease being trapped by dogma or the results of other people’s thinking”, instead becoming the heroes and protagonists of their personal recovery journeys and lives.

Self-help or self-management approaches are increasingly being recognised as playing a crucial part both within and outside of statutory mental health services (Higgins et al, 2010). Such program approaches and designs, emanate from recovery topics such as problem solving, goal setting, symptom control, relapse prevention, shared decision making and support. Programmes are either guided, as with a workshop or individual sessions, or non-
guided, as with self-help books or Internet resources (Doughty, Duncan, McIntyre, 2008). Although self-management approaches are touted as an integral part of recovery based practices (Social Care Institute for Excellence (SCIE) et al., 2007) an international review found comparatively little evidence of self-management methods in mental health settings. Neither was there any real clarity on how self-management could be promoted in mental health services (Singh & Ham, 2006). Hill, Roberts & Igbrude (2009) proposed that although self-care and self-management are prominent and valued goals of progressive services, the available models and evidence of successful outcomes are partial, provisional and largely anecdotal. The researchers refer to the Future Vision Coalition Report (2009). This report recommended that self management tools, such as Wellness Recovery Action Planning (WRAP) should be more widely used in the everyday practice of mental health services (Future Vision Coalition, 2009). The need for further research on the successful methods of supporting self management and recovery approaches, has similarly been highlighted by the Royal College of Psychiatrists (2009).

**Wellness Recovery Action Planning (WRAP):**

Several manualised self-management programs have been developed in recent years, but perhaps the most widely disseminated is Mary Ellen Copeland’s Wellness Recovery Action Planning, known as WRAP (Copeland, 1997). WRAP is a program in which participants identify internal and external resources for facilitating recovery, and then use these tools to create their own individualised plan for successful living (Copeland, 1997).

Having been diagnosed with bipolar disorder, major depression, fibromyalgia and chronic myofascial pain syndrome, Mary Ellen Copeland set about developing a self management system, which initially worked for her, and then became an approach which Copeland felt could easily be adapted for use with virtually any chronic mental and/or physical illness (Copeland, 1999). The system became known as WRAP, and is based on the recovery principles of hope, self advocacy, personal responsibility, education and support. Copeland was responsible for developing a practical way of turning these principles into an effective self management approach.
WRAP is a self-management system, designed by consumers of service (Copeland & Mead, 2004). It enables individuals to develop a range of effective strategies for self-directed care (Starnino et al, 2010) as well as promoting movement from mental health management to a more active collaboration between health care professionals and consumers (Doughty et al, 2008). WRAP assists people in identifying the factors which contribute to and enhance their lives, or inhibit and prolong mental ill-health. Participants create their own personalised WRAP, which identifies early warning signs and triggers for distress, in addition to listing internal and external resources, to support their ongoing mental health and recovery. Such uniquely individualised plans include strategies for positive daily living, a list of ways for creating and maintaining positive wellness, and plans for recognising and challenging triggers to distress. Personalised WRAP plans also include advanced directives. These inform a list of preferences for care and treatment, in the event of a person becoming unwell or unable to care for themselves, or advocate on their own behalf.

WRAP is underpinned by a number of core principles, which include:

- That recovery is possible (hope)
- That individuals should take personal responsibility for their own lives and wellbeing (personal responsibility)
- That it is important to know yourself, to be self aware (education)
- That it is important to believe in and advocate for oneself (self advocacy) and that the support of others is vital (support)

Changes in behaviour and attitude are brought about through new learning of skills, designed to assist in wellness maintenance, along with symptom reduction. Commonly used strategies include the establishment of personalised “wellness tools” from which one can draw upon in daily life. Recognition of “early warning signs” and “triggers” of mental ill-health are also identified by participants, as well as learning how to take appropriate action and personal responsibility for maintaining one’s wellness whenever and wherever
possible. A variety of formal and informal supports are listed, with whom one is happy to share their individual recovery journey, and if necessary, hand over responsibility of care. Participants of WRAP are thus empowered to take charge of what happens to them within their recovery journey (Copeland Centre for Wellness & Recovery, 2009a, 2009b).

**Structure and Method of WRAP Intervention:**

The principles and practice of WRAP were laid out in its first formal publication in 1997 and since then, WRAP has been taught to tens of thousands of consumers and providers, nationally and internationally (Copeland, 2002). The typical WRAP series lasts for 8-10 weeks with weekly sessions of 1.5-2 hour group education sessions. Topics include: Introduction to WRAP Principles, Developing a Wellness Toolbox, Creating a Daily Maintenance Plan, Identifying Triggers, Identifying Early Warning Signs, Managing When Things Break Down, and Crisis Planning. (see Appendix 5)

Coursework is interactive, using lecture, group discussion, elicitation of personal examples from the lives of both facilitators and participants, and individual or group exercises. At the first session, participants receive an empty WRAP binder to hold handouts and daily exercises completed at each group meeting. Over time, this binder comes to constitute the individual’s personalised WRAP plan. Between sessions, participants are encouraged to work on their WRAP plan. This is done by way of referring to their identified helpful tools and triggers, as well as adding new material through observations that grow out of voluntary or assigned “homework” exercises.

**WRAP Facilitators:**

WRAP facilitators are required to have completed an intensive 5-Day training from the Copeland Centre, graduating with a Mental Health Recovery Educator certificate. This qualifies them to lead or facilitate groups. WRAP training does not discriminate with respect to participants, who may be from very mixed origins, and facilitators are encouraged to
avoid talking directly about psychiatric diagnoses or using either medical or illness-oriented language, which makes the group more openly accessible. Higgins et al (2010), described their participant population as consisting of people with personal experience of mental health problems, practitioners in mental health services, and family members/carers of people with mental health problems. The focus of the group is led positively by facilitators, with emphasis on holistic health, wellness, strengths, and social support. This encourages people to move beyond simply managing symptoms, to building a meaningful life in the community, by using a highly individualized plan for recovery.

Pratt (2013) discusses the effectiveness of WRAP training, with respect to participants who then proceed to become trainers/facilitators. She concluded that delivering WRAP training to groups can have a positive impact on the well-being of the facilitators themselves. Thus, involving people with lived experience in the delivery of WRAP groups further promotes the recovery journey of facilitators (Pratt, 2013). Once certified, WRAP educators are encouraged to attend an annual conference sponsored by the Copeland Centre to update their WRAP knowledge base and facilitator skills.

WRAP Evidence Base:

Despite the fact that WRAP is one of the most widely used illness self-management programs, until recently there has been little or no available scientific research giving evidence of its effectiveness (Starnino, Mariscal, Holter,, 2010). Starnino and colleagues (2010) offered a preliminary study, examining the impact of participation in WRAP, on the ability of individuals with severe mental illness to achieve key recovery related outcomes. Paired sample t-tests were conducted on a sample of 30 participants, to examine the effectiveness of WRAP on hope, recovery orientation and level of symptoms, immediately before and after engaging in a 12-week WRAP program. Measures used, included a combination of demographic information, as well as three dependent measures, which were administered face-to-face by trained researchers pre and post test. The results indicated that individuals who participated in WRAP experienced a statistically significant increase in
hope and recovery orientation. These results supported the findings from Cook et al’s (2009) initial outcomes study (later discussed), which also reported improvements in overall recovery, including hopefulness. While Cooke and colleagues found a significant decrease in global symptom severity, Starnino et al (2010) did not find a statistically significant improvement in symptoms. Of note however, is that the participants did show a positive trend in symptom improvement which approached significance (Starnino, 2010).

Cook et al’s (2009) study, provides encouraging evidence in relation to the impact of WRAP on a variety of recovery-related outcomes. The researchers examined changes in measures of recovery and other psychosocial outcomes. Research was conducted in five Ohio (USA) sites, where participants completed an eight-week, peer-led WRAP intervention, with early promising results. Eighty participants with severe mental health difficulties, completed telephone interviews at baseline and one month after the intervention. Paired t-tests of pre and post-intervention scores, revealed significant improvement in self-reported symptoms; recovery, hopefulness, self advocacy, and physical health. Empowerment decreased slightly, and no significant changes were observed for social support. Those attending six or more sessions showed greater improvement than those attending fewer sessions.

This was the first study to document participant changes across multiple study sites, using valid and reliable outcome measures, independent data collection, and fidelity assessment (Cooke, Copeland, Hamilton, Jonikas & Razzano, 2009). The results provided initial assurance, regarding the relative effectiveness of WRAP.

As a follow-up to this research, Cook, Copeland, Corey & colleagues (2010) advanced the knowledge base for peer-lead services using WRAP. Statistical evidence from 381 participants in two regionally diverse states was reported, using pre-post comparisons. The survey instrument used, assessed three dimensions of self management: 1) attitudes, such as hope for recovery and responsibility for one’s own wellness; 2) knowledge, regarding topics such as early warning signs of decompensation (functional deterioration of a previously working system) and symptom triggers, and 3) skills, such as identification of a
social support network and the use of wellness tools. Results indicated significant positive changes in 1) participants’ hopefulness for their own recovery; 2) awareness of individual early warning signs of decompensation; 3) use of wellness tools in one’s daily routine; 4) awareness of one’s own symptom triggers; 5) having a crisis plan in place; 6) having a plan for dealing with symptoms; 7) having a social support system; and 8) ability to take responsibility for one’s own wellness (Cook et al, 2010).

The state of Minnesota’s evaluation of its WRAP program, examined the results of 42 WRAP cycles held throughout the state in 2002 and 2003. A total of 305 mental health consumers participated, and 234 of these completed pre/post tests yielding a 77% response rate (Buffington, 2003). Two-tailed tests of differences revealed that following the training, significantly greater percentages of participants self-reported having hope of recovery, taking responsibility for their own wellness, having a support system in place, managing their medications, having a list of things to do every day in order to remain well, being aware of symptom triggers as well as early warning signs of psychosis, having a plan to deal with prodromal symptoms, having a crisis plan, having a lifestyle that promotes recovery, and finding it easier to engage in recovery promoting activities. Of the 234 respondents, 44% responded to a follow-up survey conducted 90 days after the end of the WRAP intervention. All respondents (100%) reported feeling more hopeful about their recovery and 93% said they had encouraged other consumers to participate in WRAP.

These findings contribute significantly to the evidence base for peer-led services, notwithstanding the limitation of control groups being absent from the research. Without a control group, we cannot definitely attribute changes observed among participants to receipt of WRAP education (Cook, Copeland et al, 2010). The first evaluation of WRAP which included a control group as well as follow-up measures, was led by Sadaaki Fukui and colleagues in 2011. Repeated measures analysis of covariance and planned comparisons before and after the intervention were conducted. The research results indicated statistically significant group intervention effects, with experimental group participants experiencing reductions in psychiatric symptoms. Experimental participants also
significantly improved their sense of hope after the WRAP intervention. Fukui et al (2011) in their long-term research with 6-month follow-up post WRAP intervention, indicated symptom reduction that is typically difficult to observe in shorter term studies (Starnino et al, 2010).

Closer to home, Higgins et al (2010) conducted an evaluation of mental health recovery and WRAP in Ireland, using a mixed methods pre-post evaluation. The programme was developed by the Irish Mental Health and Recovery Education Consortium (IMHREC) with the aim of using recovery concepts and WRAP with people who had personal experience of mental health problems, family members/carers and mental health practitioners. Findings indicated that the programme impacted positively on participants’ knowledge, attitudes and beliefs about recovery and WRAP, as well as their self-rated ability to manage their own mental health and recovery. The study did not include a control group for comparison.

Since WRAP initiatives are currently ongoing in all 50 states of the United States (Copeland, Personal Communication), there are numerous opportunities to engage in further, more rigorous evaluations to inform the field about the efficacy of this consumer-directed service (www.mentalhealthrecovery.com/wrap). The Vermont Recovery Education Project (Copeland, 1995) completed 23 cycles of WRAP training, involving 435 participants over the course of two years (1997-1999). 193 participants completed pre-test/post-test evaluations, signifying a 44% response rate. Paired, 2-tailed t-tests of mean differences of participants, revealed significant increases in consumers’ self reported knowledge in identifying the following: early warning signs of psychosis, tools and skills for coping with prodromal symptoms, preferences for using natural supports, use of daily wellness tools, and hope for recovery. Also found were significant increases in consumers’ self-rated ability to create crisis plans and identify relevant supporters. Finally, results showed that post WRAP intervention, consumers reported being significantly more comfortable in asking questions and obtaining information about community services and engaging in self-advocacy (www.mentalhealthrecovery.com).
Indeed, a fundamental aspect of successful illness self-management for people with serious mental illnesses is the ability to advocate for themselves in health and rehabilitation settings. A recent randomized controlled trial by Jonikas, Grey, Copeland, et al (2013), examined the propensity for patient self-advocacy, among those receiving WRAP and those who received usual care. Outcomes were self-reported engagement in self-advocacy with service providers, and the relationship between patient self-advocacy and other key recovery outcomes. In a multivariable analysis, at immediate post-intervention and 6-month follow-up, WRAP participants were significantly more likely than controls to report engaging in self-advocacy with their service providers. Higher self-advocacy also was associated with greater hopefulness, better environmental quality of life, and fewer psychiatric symptoms among the intervention group (Jonikas et al. 2013). These findings provide additional, recent support for the positive impact of peer-led illness self-management on mental health recovery.

**Informing the Present Study: WRAP’s Non-Exclusivity**

Unlike many traditional mental health interventions, WRAP is intended to help people manage a variety of long-term illnesses, whether or not they choose to receive formal services or support. This appears in stark contrast to the more traditional, illness-based models of treatment (previously alluded to in this research). WRAP is presented as a forward-thinking, cutting-edge approach, which holds appeal on many different levels, not least of all for its potential ability to be applied to any condition. This includes substance abuse, depression and various other mental health conditions (Davidson, 2005).

This appropriately brings focus to Martin Seligman’s lengthy interview with the Los Angeles Times, (Proffitt, 1999) in which he defined the major premises of ‘Positive Psychology’. Seligman proposed that if you teach people to be optimistic and resilient, they are less likely to suffer depression and will lead a more productive life, since optimism and self-esteem go hand in hand. This definition does not appear to preclude any one population, thus offering the same potential to all. Ryff & Keyes (1995) on the other hand identified six dimensions of
“wellness”, namely autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self acceptance. As with Seligman’s previous definition, these principles similarly do not require discrimination between those who are experiencing mental ill-health, as distinct from those deemed to be ‘normal’.

It is precisely this non-exclusive nature of WRAP which essentially informed my decision to include an Acquired Brain Injury (ABI) comparison population in this study. We have seen previously that many of the studies which have evaluated WRAP, have done so with severe mental illness populations. To my knowledge however, there do not appear to be any studies to date, which have examined the effectiveness of WRAP with an ABI population. Given that people who experience an ABI are just as susceptible to secondary anxiety, depression, loss of interest in life etc. following an acquired brain injury (further discussed below), it would perhaps make sense that the same WRAP self management techniques, might also assist in the alleviation of symptomatology for this population also?

**Effects of WRAP on Depression and Anxiety:**

To date, the overall effects of WRAP in relation to knowledge and application of recovery and recovery strategies, have been quite extensively examined within mental illness populations (as indicated in previously outlined studies). For the purpose of this study I have chosen to examine the pre and post effects of WRAP, specifically on depression and anxiety levels in a mental health and acquired brain injury (ABI) population (with control group counterparts). Cook, Copeland, Floyd, et al (2012) similarly, in recognising that we cannot definitely attribute changes observed among participants to receipt of WRAP education in the absence of a control group (Cook, Copeland et al, 2010) conducted a randomised study. This study assessed the effectiveness of WRAP in reducing depression and anxiety and increasing self-perceived recovery among individuals with a serious mental illness. Results showed that compared with the control group, intervention participants reported significantly greater reduction over time in Brief Symptom Inventory Depression and Anxiety subscales, as well as the subscales measuring personal confidence and goal orientation (Cook et al, 2012).
But what of Acquired Brain Injury?

Mood and anxiety disorders are frequent psychiatric complications among patients who have a traumatic brain injury (Silver, Kramer, Greenwald, et al., 2001). Major depression resulting from a traumatic brain injury, greatly hinders an individual’s recovery since it is associated with executive dysfunction, negative affect and prominent anxiety symptoms (Jorge et al, 2004). In a study which examined major depression following Traumatic Brain Injury, Jorge, Robinson, Moser et al., (2004) observed that major depressive disorder was evident in 30 of 91 patients during the first year after sustaining a traumatic brain injury (TBI). Major depressive disorder was significantly more frequent among patients with TBI than among controls. Patients with major depression also exhibited comorbid anxiety (76.7%) and aggressive behaviour (56.7%). Major depression was also associated with poorer social functioning at 6 and 12 month follow-ups.

Cookson & Casey (2013) similarly observed that many patients suffer from psychological problems following a stroke (ABI) with the most common problem being depression. The prevalence of post-stroke depression varies considerably in the literature. This appears to depend on the setting (community versus hospital), measures employed (clinical interview or questionnaire), time post-stroke, and diagnostic criteria used. Hackett, Anderson, House, (2005) used data from 51 studies to estimate that 33% of stroke patients present with depressive symptoms at some point during follow-up, while Hewison (2007) found a significant relationship between support availability and mood scores. This appears consistent with the buffering theory, whereby social support affects wellbeing by reducing or removing the impact of stressors. Evidence has suggested that social support may not be immediately implicated with post-stroke (post ABI) depression, but rather its influence manifests at a relatively late stage (Astrom, Adolfsson & Asplund, 1993). This suggests a later shift towards the need for social support when patients have been discharged from hospital and are adapting to life after their stroke.
This evidence would indeed appear to corroborate that which I have observed through working in a community based, acquired brain injury service. While the functional and physical effects of an ABI can be devastating, consumers of service regularly report the social and emotional effects of their injury as having the most detrimental effects. Such consequences are in many cases far-reaching, impacting the survivor’s lives as well as those of their caregivers, families and friends. In many cases, the simple act of attending a service specifically designed to re-integrate and establish community independence for survivors, does much in re-establishing social support as well as maintaining vital human connection. This is evidenced by Hilari, Northcott, Roy, et al’s (2010) observation, which found the main predictors of psychological distress for stroke survivors were stroke severity at baseline, low social support at three months, and loneliness and low satisfaction with social network at six months. This perhaps indicates, that the more social support an individual has post ABI, the less chance of him/her experiencing psychological adjustment difficulties? Would the additional influence of a WRAP programme further enhance the social support of consumers of service (in addition to the already reported benefits of attending the service), as well as assisting in maintaining psychological wellness?

The Present Study

The present study attempted to address the above questions, by way of assessing the effectiveness of WRAP with Mental Health and Acquired Brain Injury populations. Corresponding wait-list control groups provided meaningful comparisons, and the study used a pre-post questionnaire design for statistical analysis. As per earlier rationale, my reasons for examining these populations were many, including:

- **Accessibility:** I largely work with these groups, so it made pragmatic sense to do research in an area where I spend a considerable amount of time.

- **Evaluative:** I was curious to examine the effectiveness of WRAP as an intervention as well as examine its between-group effects in ABI and Adult Mental Health populations.

- **Paucity of Research:** Upon investigation, there appeared to be a marked dearth of empirical research pertaining to WRAP. While anecdotal evidence of its
effectiveness was clearly visible, little formal objective research appeared to support its use.

- ABI and WRAP: While the brainchild of WRAP, Mary Ellen Copeland, makes many references to its applicability “with any population”, this non-exclusivity was not reflected in the research literature with regard to ABI. I found no research studies in any of the search engines, pertaining to WRAP and ABI.

- Research Focus: While many of the studies (previously outlined) examined overall symptomatic recovery effects, post WRAP intervention, I chose to pay particular attention to examining the effects of WRAP on anxiety and depression scores. My reason for this was two-fold: 1) The extreme prevalence of anxiety and depression amongst Adult Mental Health populations with whom I work, and 2) The observed onset in many clients of Anxiety and Depression, post ABI. These secondary impairments, in many incidences, appeared to have a greater, more sustained, detrimental impact on the individual’s life than the actual ABI. This was measured using the Hospital Anxiety and Depression Scale (HADS).

- Professional/Ethical: As enjoined by the PSI and BPS codes of Ethics, Professional Psychologists are required to systematically evaluate and assess their work. With this in mind and having completed the required WRAP Copeland Training, this was an ideal time for me to evaluate my work as a WRAP facilitator.

- Contribution to the field of Professional Research: As WRAP is quite new and cutting edge so to speak, I was excited to examine and assess its applicability with the aforementioned populations. Systematic evaluation is clearly necessary before wider applicability may be considered. The present research seeks to make a significant contribution with an evaluation. In so doing, I hope to offer a new and in the case of ABI and WRAP, a never before examined area of psychological research. This I anticipate, will impact positively on future research as well as professional practice.
Formal Research Questions:

1) Would WRAP have an overall positive effect on Depression and Anxiety for Mental Health participants and Acquired Brain Injury participants, as measured by the Hospital Anxiety and Depression Inventory (HADS)?

2) Would WRAP participants have greater effects in their reported levels of Depression and Anxiety compared to their control group counterparts, as measured by HADS?

3) Did participants’ overall knowledge of Recovery increase, as measured by the Mental Health Recovery Measure (MHRM)?

4) Did participants overall knowledge of WRAP and Recovery as measured by the WRAP Copeland Scale (adapted version) increase?

5) Due to the memory, attention and concentration problems often observed in individuals with ABI, would the impact of participation in WRAP be greater for the Mental Health population, as evidenced across all measures?

Regarding question 5, while it may be argued that people with Mental Health diagnoses, similarly experience attention, memory and concentration problems, my rationale for posing this question related to my experience of working with ABI groups. Previous observation led me to question the ability of some ABI clients (depending on their level of impairment), to fully attend to material as competently perhaps, as individuals functioning with mental health issues in the absence of an ABI.
References


Slade, M. (2010). Mental illness and well-being: the central importance of positive psychology and recovery approaches. BMC Health Services Research, 10, 10-26


www.mentalhealthrecovery.com/wrap
Chapter 2 : Methodology

Preliminary Ethical Considerations :

Approval for this research was obtained from the Ethics Committee of City University, London, and the Ethics Committee of National Learning Network. (see Appendix 2).

Aim :

The aim of the study was to examine the effectiveness of Wellness Recovery Action Planning (WRAP) in improving the positive mental health and wellbeing of individuals with an acquired brain injury, and those with mental health difficulties.

Rationale for Methodology :

The research was undertaken in the Western Region of National Learning Network (NLN), Ireland, where I am employed as a Psychologist. Recovery and aspects thereof, is an area of both professional and personal interest to me, thus it made pragmatic as well as logistical sense to conduct research in this area. As a newly qualified WRAP facilitator, I was keen to evaluate my work in this respect, a practice which is largely encouraged and enjoined by the Psychological Society of Ireland and British Psychological Society’s Codes’ of Professional Standards and Ethics. I hoped to also be in a position to offer relevant statistical data to NLN and funders alike. Such data might suggest effective practices which would hold future promise for the NLN organisation, as well as identifying areas for improvement. Lastly, I wished to add to the existing body of evidence based recovery research, with specific focus on twenty-first century WRAP, of which there appeared a distinct paucity of research findings.
Context to Recruitment Selection:

To provide a brief initial backdrop to the study, NLN provides rehabilitative and training facilities to individuals with mental health, learning, ABI, forensic, physical, social and sensorial disabilities. Individuals are supported in an individualised learning environment through their daily living and learning requirements, towards future employment and/or training. Each NLN centre delivers a unique training environment and experience, whereby individuals can learn about accepting their particular challenge in life, while developing the appropriate, interpersonal strengths and skills to cope with, and transcend such presenting limitations. Individuals learn to enhance their independent living skills, and are also presented with an opportunity to gain a sense of purpose through routine attendance and social interaction with others, with whom share the same, or a similar experience. The option is available for those who wish to attain Further Education and Training Awards certifications (FETAC) through completion of various approved modules, e.g. I.T. with the pace dictated by each individual, and supported by a team of multi-disciplinary staff.

Recruitment Selection:

The research was conducted by way of a Purposive Sample in the West of Ireland. Individuals attending NLN training centres in the west, where I am employed as a Consulting Psychologist, were selected on the basis of their relative diagnoses, corresponding to the subject under investigation. Since the research involved comparing the effects of a WRAP intervention, with mental health and acquired brain injury groups, these were evidently the individuals under review. “Fresh Start” a specific skills training programme of NLN, located in Castlebar, Co. Mayo was included in the sample selection of mental health participants, as was “Tuas Nua”, a similarly designed mental health programme, located in Belmullet, Co. Mayo. Quest Brain Injury Services, Galway, a specialised training and rehabilitative service, for people with an acquired brain injury (ABI), yielded the relevant participants relative to the adaptation of WRAP with ABI survivors.
Participants:

The WRAP intervention was delivered simultaneously across various NLN sites located in the West of Ireland. These included Quest, Galway, NLN Castlebar, and NLN Belmullet. A total of 6 experimental groups took part in the study, comprising 3 ABI groups (N=30) and 3 Mental Health groups (N=27). All participants had suitable proficiency in the English language.

The ABI experimental groups comprised 21 males and 9 females (N=30) between the ages of 19-59 years, spread over 3 separate groups. Two corresponding wait-list control group (N=17) comprised 12 males and 5 females with ABI, aged 19-59 years. The ABI group consisted mainly of stroke survivors, persons impacted by road traffic accidents, assaults and falls. All individuals were medically and neuropsychologically pre-assessed as being capable of participating in the WRAP programme.

The Mental Health experimental groups comprised 13 males and 14 females (N=27), between the ages of 19-65 years. As with the ABI group, participants were spread over 3 separate groups. Three corresponding Mental Health wait-list control groups, comprised 10 males and 21 females (N=31), between the ages of 22-55 years. The mental health group consisted of individuals with various mental health diagnoses, including depression, anxiety, OCD, schizophrenia, and psychosis. All were in a stabilised psychological condition and medically cleared to participate in WRAP.

Procedure:

As I am the Psychologist attached to the aforementioned training centres, where the research was being conducted, there were a few obvious ethical considerations. Since I, accompanied by another staff member, was facilitating the WRAP intervention, I was cognisant that individuals might feel somewhat under pressure to participate in the research. In order to manage this potential social desirability compliance, I assured clients
that WRAP was a voluntary programme and participation in the WRAP study, was absolutely 100% at each individual’s choice and discretion. Non-participation would not result in any form of diluted or diminished service, and other training and/or rehabilitative options would be made available to those who did not wish to participate in the study. Similarly, continued one-to-one therapeutic support would be maintained with non-participating individuals, as well as participants alike.

The essence of the WRAP programme was similarly outlined. Individuals were informed both verbally and in written format, the general weekly format and training delivery of WRAP, as well as the overall implications pertaining to WRAP research involvement and consent (See Appendix 3). An opportunity was then afforded to individuals to ponder their participation, and ask further questions of my colleague and I. Individuals were instructed to return their consent forms to an anonymous dropbox within one week of being given the information, outlining their final decision to participate or otherwise. Following this, those who wished to participate were given the relevant questionnaires to complete at the first official scheduled WRAP session. Any further assistance required for completion of measures was duly provided.

1. In each group, the WRAP programme consisted of 8 to 12 weekly sessions, lasting from 90 to 120 minutes each, with a break half-way through each session. All groups were taught by my colleague and I, both of whom received the equivalent training from a certified Copeland Centre WRAP trainer. Each group followed a similar protocol, whereby participants were assisted to create an individualized WRAP plan. This was designed with the aim in mind of recognizing the progression of symptoms, and planning in advance how to manage these symptoms. Coursework included lectures, group discussions, personal examples from the lives of us, the educators, and participants alike. Individual and group exercises and voluntary homework assignments were also included. An introductory session conveyed the key concepts of WRAP as well as completion of questionnaires. The remaining sessions, included
the following: Identifying personal “Wellness Tools”, including a list of personalised management tools, necessary to maintain positive mental health and well-being.


3. Identifying “Triggers” or external events, circumstances, people and things which might trigger a negative reaction.

4. Addressing early warning signs, or internal signals the body uses to convey distress

5. Developing a plan for “When things are breaking down”.

6. Developing a “Crisis plan” to identify helpful things and people to advocate on one’s behalf when he/she is not in a position to do so alone.

7. Developing a “Post Crisis plan” so supporters will know when to step back and allow the individual to take control again.

In addition to covering the key concepts and fundamentals of a WRAP plan, time was also given to any pertinent issues which spontaneously arose from each group e.g. Anger Management and Impulse Control issues, Thought Management etc. A variety of Positive Psychology techniques were offered, as well as alerting participants to specific concerns which might need to be addressed in order to complete and use a plan effectively, e.g. general health care, management of medications, suicide prevention.

In the event of an issue arising for someone during a WRAP session, and the individual requiring a more personalised one-to-one intervention, this was made available after each group session. There were no dropouts from any of the groups, with the exception of one individual with an ABI, who left the Quest service when she became gainfully employed. In the rare event of absenteeism, participants were offered an opportunity to “catch-up” on a one-to-one basis, prior to the next session.

(see Appendix 5 for comprehensive WRAP outline).
Measures:

After extensive review of the literature pertaining to recovery measures, I finally chose the measures which I felt would best capture the information required, as well those which would best accommodate both populations under research (See Appendix 4).

The primary outcome measures for the current analyses were The Hospital Anxiety and Depression Scale (HADS) (Sigmund & Snaith, 1983) and The Mental Health Recovery Measure (MHRM, Young & Bullock, 2003).

Other measures used, included an adapted version of the Copeland Wellness and Recovery Survey (Copeland, undated) and the Irish Mental Health Recovery and WRAP Training Pre and Post education Questionnaires (Higgins et al. 2011).

The Hospital Anxiety and Depression Scale (HADS)

The Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) was chosen to provide a simple yet reliable tool to assess levels of anxiety and depression, pre and post WRAP intervention. Originally developed for use in medical practice, the term ‘hospital’ in its title suggests that the HADS is only valid for use in such a setting, however many studies conducted throughout the world have confirmed its validity when used in both community settings and primary care medical practice (Snaith, 2003).

The HADS is considered to be unbiased by coexisting general medical conditions (Snaith, 1987). This largely influenced my decision when searching for a suitable instrument to measure the Depression and Anxiety levels of individuals with an ABI. HADS is free from potential scoring interference from somatic disorders (Bjelland, Dahl, Haug & Neckelmann, 2002) such as dizziness, headaches, insomnia, anergia, weight loss and fatigue; experiences which are frequently observed in an ABI population.
The HADS is a 14-item self-report screening scale. It contains two subscales, one for anxiety (HADS-A) and one for depression (HADS-D). The 7 items on each subscale are intermingled, and each have a score range of 0-21. Thought was also given as to whether or not the wording of the items of the HADS would be easily comprehended by all participants of the WRAP study. This included the control participants. In cases of illiteracy, or poor vision, the wording of items and possible responses were read to individuals.

Regarding results, a score of 0 to 7 for either subscale is regarded as being in the normal range, a score of 11 or higher may indicate probable presence (‘caseness’) of the mood disorder, while a score of 8 to 10 may be suggestive of the presence of the respective state (Snaith, 2003). Each mood state is then divided into four ranges of normal, mild, moderate and severe.

Validation studies of the English and foreign language translations of the HADS were undertaken in a variety of settings and centres (Snaith, 2003). The first of these reviews was conducted by Herrmann in 1997; while a more recent study (Bjelland et al., 2002) concluded: “The HADS was found to perform well in assessing severity and caseness of anxiety disorders and depression in both somatic and psychiatric cases and (not only in hospital practice for which it was first designed), in primary care patients and the general population also”.

**Mental Health Recovery Measure (MHRM)**

The MHRM (Young & Bullock, 2003), is a self-report measure specifically designed to assess mental health recovery for individuals with severe and persistent mental illness (Smith, 2009). The items and domains of the MHRM were developed from a qualitatively derived grounded-theory model of recovery, based on the phenomenology of recovery from the perspective of persons with psychiatric disabilities (Young & Ensing, 1999). The MHRM is a 41-item scale which comprises six domains or subscales, corresponding to six higher order
categories of the recovery model (Andresen, Caputi & Oades, 2006). These subscales include the following: 1) Overcoming Stuckness 2) Self-Empowerment 3) Learning and Self-Redefinition 4) Basic Functioning 5) Overall Well-Being, and 6) Reaching New Potentials. Additional domains include Spirituality and Advocacy/Enrichment.

The MHRM can be used to compare group average changes (e.g. average pre-treatment score vs. Post-treatment vs follow-up), or the Total Score change can be assessed on an individual basis (as a difference score) and compared to a threshold for significant change. In this way, the proportion of individuals whose change scores represent “reliable improvement” or “reliable deterioration” over the course of the treatment programme may be calculated. Based on the one-week test-retest reliability of the MHRM, Total Score from the original standardization sample, a change score of +_ 10 (Reliable Change Index = 1.29) on the MHRM is used as an indication of significant individual change (Jacobson & Truax, 1981).

The total score for the MHRM is derived by adding up the number corresponding to the response for each item (using a 0,1,2,3,4 Likert Scale, with 0=Strongly Disagree; 2= Not Sure; 3= Agree; and 4=Strongly Agree). There are no reverse scored items. The theoretical range for the Total Score is 0-120. Higher scores correspond to a higher self-reported level of mental health recovery. Separate norms have not been developed for different populations, although Bullock, Sage, Hupp, et al., (2009) proposed that individuals who have completed a recovery oriented program, such as WRAP, score higher.

WRAP Pre and Post Survey (adapted from the Copeland Centre for Wellness and Recovery Survey (Copeland, undated))

The WRAP questionnaire is essentially, an overall measure of what participants know and learn with regard to the fundamentals of recovery, and essentials to an individualised WRAP
plan. The 16 item survey, requires the respondent to tick “Yes” or “No”, and poses the following questions:

1. Do you take responsibility for your own wellness?
2. Do you feel it is important to educate yourself about the symptoms you experience?
3. Do you know how to advocate for yourself to get what you want/need?
4. Do you like yourself?
5. Do you know how to advocate for yourself to get what you want/need?
6. Do you feel supported in your daily struggles?
7. Do you have special things you do every day to insure you are taking good care of yourself?
8. Do you know what triggers you into feeling unwell?
9. Do you have a plan in place or a list of things to do if you are triggered?
10. Can you identify early warning signs that your symptoms are worsening?
11. Do you have a plan or ideas of what you can do if you are feeling much worse?
12. Do you know how to change negative thoughts to positive thoughts?
13. Do you have supporters who can help you through if you are experiencing a crisis?
14. Do you think your lifestyle helps you to feel better and get well?
15. Do you think there are aspects of your current lifestyle that need changing in order for you to feel better?
16. Do you feel empowered and in charge of your positive mental health?

**Initially Proposed Pre and Post WRAP Training Questionnaires, (Higgins et al., 2011)**

I initially proposed to use WRAP pre and post training questionnaires, as adopted by Professor Higgins et al. (2011) in their pre-post evaluation of Wellness Recovery Action Planning education. I considered this in light of it having been the first of its kind in Ireland to formally evaluate the effectiveness of WRAP using a specifically designed measure, with reported positive findings. The questionnaire appeared to hold useful information with regard to examining participants’ attitudes and beliefs about recovery, as well as assessing pre and post knowledge of Recovery and WRAP.
Upon initial administration with Group 1, ABI, it became apparent that the questionnaire was proving somewhat problematic. Individuals complained of the questionnaire being “too long”, the questions “too wordy” with many questions remaining unanswered when I set about analysing the data. I tried to address potential reading or verbal comprehension difficulties by reading through each question aloud, as well as offering one to one assistance to anyone in need of additional support. The results were spoiled nonetheless, and insufficiently complete to undertake further analyses. Feedback from the ABI Control Group, who were sent questionnaires to complete via mail, was even more worrisome. Out of the first group of 10 people, only 2 questionnaires were returned, with several omitted responses.

The Adult Mental Health group appeared to have less difficulty completing the questionnaire, however still complained of it being very long and cumbersome. Their respective wait-list control group counterparts, recorded similar challenges.

Being persistent, I decided to give this questionnaire one more try with Group 2. I reasoned that perhaps it was just Group 1 with whom the questionnaire presented particular challenges, and after all, it did appear to hold useful information in relation to assessing the overall effectiveness of the WRAP programme. Unfortunately, the feedback I received from the second administration was no better. Similar issues were presenting for each of the groups. I discussed the situation with my supervisor, who was aware of the issues to date. He advised that I might better focus my attention henceforth, on the measures which were being completed with ease, and abandon use of the current measure. He was confident nonetheless, that I would yield sufficient information from the Copeland WRAP measure, to assess the relative effectiveness of the WRAP programme per se.
Data Collection:

Data were collected over a period of 18 months, from June, 2011 to December, 2012. This time-frame adequately accommodated initial data collation, questionnaire revision, tweaking of data collection and addressing limitations, breaks between groups, and holidays. Using the aforementioned questionnaires, participants completed pre and post measures, while wait-list control groups followed corresponding timelines for completion.

Due to insufficient ABI controls (just 4 recorded at the annual 2012, LCU review), I was required to approach previous attendees of the Quest ABI Programme. An offer letter was sent via mail to selected individuals, asking if they wished to participate in the study, with a view to receiving the WRAP intervention sometime in the future (see Appendix 1.3). Such individuals were selected on the basis of known cognitive capacity, since they would be required to complete the questionnaires in their homes, without the guidance of a WRAP facilitator. Fortunately, from this postal administration, I received a positive response, with thirteen out of the sixteen respondents consenting to participate, and returning the completed measures as requested.

A similar situation arose with the Mental Health Control Group. This was mainly because all active individuals attending mental health programmes in my NLN centres, had previously consented to participating in WRAP, thus there were few remaining to be wait-listed. In order to achieve statistical power, I was required to ask my colleagues working in the NLN, Midlands, West and North-East of the country, if their students awaiting WRAP, might wish to participate in the study. This resulted in valuable data from an additional 20 individuals, on various other mental health programmes, to whom the questionnaires were administered face-to-face by my fellow-colleagues.
### Chapter 3: Results & Analysis

Mean values, for pre and post measures of HADS anxiety, HADS depression and the Wellness Recovery Action Planning (WRAP) scales, are shown in Table 1 below:

<table>
<thead>
<tr>
<th>GROUP</th>
<th>HADS anxiety pre</th>
<th>HADS anxiety post</th>
<th>HADS depression pre</th>
<th>HADS depression post</th>
<th>WRAP pre</th>
<th>WRAP post</th>
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<tr>
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<td>Std. Error of Kurtosis</td>
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<td>-.36</td>
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</table>

**TABLE 1** Means and Distributional Statistics for HADS and WRAP Measures for Acquired Brain Injury (ABI) and Mental Health (MH) Intervention and Control Groups
Skew and kurtosis for pre and post measures were investigated, and are shown for each of the four groups; ABI experimental, ABI control, Mental Health (MH) experimental, and Mental Health control. For most groups and conditions, it appears that the data are normally distributed; neither skewness nor kurtosis, exceed twice its respective standard error. It is therefore considered appropriate to subject the data to analysis of variance.

There were nonetheless, some exceptions to the normal distribution. The ABI control group WRAP measure, displayed a rather high, negative kurtosis. The Mental Health group similarly showed some rather skewed and kurtotic distributions. It was nevertheless considered appropriate to proceed with analysis of variance, notwithstanding the necessity to re-check analyses of these groups using non-parametric methods, prior to forming any robust conclusions.

**HADS Anxiety and Depression**:

Initial inspection of the data in Table 1 shows affirmative answers in response to the initial questions posed by this research study; namely the relative effectiveness of the WRAP intervention. Some participants however, omitted various items on the HADS scale, thereby reducing the numbers for whom anxiety and depression subscales could be computed. Table 1 therefore shows unequal numbers for this scale.

With respect to the ABI experimental group, Anxiety (as measured by the HADS) plummets from a mean score of 9.36 pre WRAP intervention, to 6.69 post WRAP intervention. For the ABI control group however, there is no such decrease, with 7.88 recorded as the mean score pre intervention, and 8.29 post intervention.

The Depression score (as measured by HADS) presents a similar picture. The ABI experimental group records a mean of 6.83 pre WRAP intervention, which drops to 5.20
post intervention. The corresponding means for the control group remain however, reasonably constant, with 7.24 recorded pre intervention, and 7.49 recorded post intervention.

In the case of the Mental Health groups, the differences between conditions, are even more pronounced. The mean score recorded on the HADS for anxiety, pre WRAP intervention for the Mental Health group, is 11.52, while the post WRAP intervention score reads at 7.77. The corresponding anxiety score for the control group, is recorded at 10.77 pre, and 11.13 post, showing an increase in anxiety over time, for the non-experimental group.

The Depression score for the Mental Health experimental group (as measured by HADS), records the mean score as dropping from a pre WRAP intervention score of 8.64, to a post score of 5.24. As before, there appears little change in the levels for the control group, recorded at 7.29 pre, and 8.10 post.

In order to assess the statistical significance of the above mean differences, a repeated measures analysis of variance was undertaken for the two dependent variables; namely, HADS Anxiety and HADS Depression. In order to assess the statistical significance of the above mean differences, a repeated measures analysis of variance was undertaken for the two dependent variables; namely HADS Anxiety and HADS Depression.

**Anxiety:**

Results of the ANOVA (Appendix, Table 1.1) show a significant mean effect due to time (pre v post administration): Wilks’ Lambda = .851, F (1,91)=15.97, p<.001. This suggests that the before and after mean anxiety levels differ significantly. There is also a significant interaction effect between time and group (F (3,91)=13.256, p<.001), demonstrating that the before/after differences are significantly different among the four groups.
In order to assess where these significant differences lie, Post-hoc ‘t’ tests (Appendix 1, Table 1.3) were performed. These present significant differences in improvement between the ABI treatment and control groups: \( t=3.27, \text{df}=30.8 \) (correcting for unequal variances), \( p<.002 \) (1-tailed test).

An even bigger significance is observed for the Mental Health treatment and control groups (\( t=4.73, \text{df}=36.2 \) (correcting for unequal variances), \( p<.001 \) (1-tailed test). (Appendix 1, Table 1.4)

These mean differences are illustrated in Figure 1 below:

**FIGURE 1** HADS Anxiety means for each group at time 1 (before) and time 2 (after)
**Depression:**

The analysis of variance (Appendix 1, Table 1.2) shows a significant main effect due to time (pre/post). This is evidenced by, Wilks’ Lambda = .886, F (1,92)=12.58, p<.001 which suggests before/after measures differ significantly across all groups.

There also appears to be a significant group by time interaction; F (3,92)=10.08, p<.001. This indicates that pre and post improvement scores differ significantly between the groups, as proposed in the initial research questions.

Post hoc tests (Appendix 1, Table 1.3) show a significant difference in improvement scores, between the ABI treatment and control groups (t=3.87, df=41.8 (correcting for unequal variances), p<.001 (1 tailed test).

Appendix 1, Table 1.4 presents a similar picture for the mental health experimental and control groups; (t=3.86, df=36.09, p<.0001 (1 tailed), indicating statistical significance.

Thus, both the ABI and Mental Health groups, show evidence of highly statistically significant differences in improvement of depression scores, between treatment and control groups.
These mean differences are illustrated in Figure 2 below:

**FIGURE 2**  HADS Depression means for each group at time 1 (before) and time 2 (after)

Both the ABI and Mental Health groups therefore, appear to show evidence of highly statistically significant differences, in improvement of depression scores, between treatment and control groups.

**WRAP:**

The WRAP questionnaire is essentially an overall measure of what participants have learned, in relation to the fundamentals of recovery and essentials to an individualised WRAP plan. In contrast to the HADS and MHRM, the WRAP measure is negatively scored. This implies
that a successful intervention, as measured by WRAP, is indicated by a decrease in score. Table 1 illustrates the means of the WRAP scores, before and after the WRAP intervention.

For the ABI experimental group, the pre-intervention mean score of 8.03, drops to 4.33 post WRAP intervention, indicating positive improvement in knowledge of WRAP and Recovery. The ABI control group showed no difference in mean scores, with a pre score of 4.94 and post score of 4.82. This makes sense, given that the control group had no previous knowledge of WRAP.

The Mental Health experimental group demonstrated a difference in mean scores, indicating a remarkable improvement from a pre score of 6.07 to a post WRAP intervention score of 1.74. The Mental Health control group showed no improvement, indicating pre and post scores of 4.83 and 4.82 respectively.

Repeated measures analysis of variance for the WRAP scale, shows a significant main effect over all groups, due to time; before/after (See Appendix 1, Table 1.5): Wilks’ Lambda = .743, F (1,99)=34.25, p<.001).

There is also evidence of a significant time by group interaction, F (3,99)=12.54, p<.001), indicating that as originally proposed, the intervention effect was significantly different among the groups.

Post hoc ‘t’ tests, to evaluate the significant interaction (Appendix 1, Table 1.3), present a significantly greater improvement for the ABI experimental group than for the ABI control group (t=3.47, df=40.67, p=.0005 (1 tailed test).

Similarly, Appendix 1, Table 1.6) presents a significantly greater improvement in WRAP scores for the Mental Health experimental group, than for the corresponding control group (t=6.75, df=40.68, p<.0001 (one tailed test).

The mean differences in WRAP scores among groups, and between administration times, are illustrated in Figure 3 below:
As previously noted, distributional characteristics of the WRAP scale, suggest the need for re-analysis, using a non-parametric test. This is intended to support the conclusion reached through analysis of variance. A Kruskall-Wallace test was undertaken, and gives further evidence to support a statistical significance of difference in improvement scores, between respective intervention and control groups (p<.0001).

**MHRM:**

Table 2 overleaf gives the Mean values, for pre and post measures of the Mental Health Recovery Measure (MHRM), as well as the distributional statistics for this measure. It presents the MHRM scale as being quite normally distributed. For each group, the levels of skew and kurtosis are reasonable, as compared with their respective standard errors. It was therefore appropriate to proceed with parametric statistical analysis.
<table>
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<th>M.H.R.M. post</th>
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<tr>
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**TABLE 2** Meas and Distributional Statistics for Mental Health Recovery Measure (MHRM) for Acquired Brian Injury (ABI) and Mental Health (MH) Intervention and Control Groups
Inspection of the means shows results in favour of one of the initial research questions posed; “Would the scores on the MHRM increase more considerably, in favour of the experimental WRAP group, as distinct from their wait-list control counterparts?”. Results would appear to indicate affirmatively.

With regard to the ABI experimental group, the pre-WRAP intervention mean score was 70.1, while the post treatment mean score is 81.1. The ABI control group mean score drops slightly, from 78.41 pre to 76.88 post.

Results appear similar for the Mental Health group. The mental health experimental group indicates an increase from 71.67 pre to 81.0 post WRAP intervention. The corresponding control group shows little, though some increase, with a pre score mean of 70.35 and post mean of 72.19.

Data were subjected to repeated measures ANOVA. This statistical analysis, presented a significant effect due to time (pre v post administration): Wilks’ Lambda = .884, F (1,101) = 13.29, p<.0001. There is also a significant time by groups interaction (F (3, 101) = 4.27, p<.01), showing that the before/after differences are significantly different across the four groups. (Appendix 1. Table 1.6)

Post hoc ‘t’ tests were conducted to analyse the significant interaction. For the ABI experimental and control groups, the difference is highly significant (t= -5.6, df=43.8, p<.0001 ) (1 tailed test). (Appendix 1, Table 1.7)

With respect to the Mental Health groups, the difference between the results from the experimental and control groups, is less significant (t=1.69, df=49.2, p<.05) (1 tailed test). (Appendix 1, Table 1.8)
Analysis:

As per outlined results, I will now attempt to answer my original research questions, by way of brief analysis.

**Research Question 1: Does WRAP have an overall positive effect on reported Depression and Anxiety levels of ABI and Mental Health participants, as measured by the HADS?**

This question was addressed by comparing means, as shown previously in Table 1. Analysis of the HADS indicates positively, that means differ significantly pre and post WRAP. This appears to be the case for both ABI (9.36 pre v 6.69 post) and Mental Health (11.52 pre v 7.77 post). These differences indicate statistical significance. The WRAP intervention therefore, appears to show strong evidence in favour of reducing the anxiety and depression levels, for both ABI and Mental Health experimental groups.

**Research Question 2: Do WRAP experimental group participants (ABI and MH) report less Anxiety and Depression, post intervention, as compared with their control group counterparts?**

The HADS Anxiety measure indicates that reductions in anxiety are much greater for the WRAP experimental group participants, than for their wait-list counterparts. In relation to the experimental ABI group, this is evidenced by a pre anxiety mean score of 9.36, which reduces to 6.69 post WRAP intervention. This suggests strongly that WRAP has a positive effect on the reported anxiety levels of ABI participants. ABI controls on the other hand, present a pre anxiety mean score of 7.88 which increases slightly to 8.29 post. This indicates a slight increase in the anxiety levels of individuals with ABI who are waiting to receive the WRAP intervention.

The HADS Depression score presents a similar picture, with the ABI experimental group recording a pre WRAP depression score of 6.83, which falls to 5.20 post intervention. This indicates a reduction in reported depressive symptomatology for ABI participants, following
the WRAP intervention. The control group means however, remain quite constant, with 7.24 recorded as the pre intervention, depression score and 7.49 post intervention.

In the case of the Mental Health groups, the differences between conditions are even more pronounced. The mean score recorded on the HADS for anxiety, pre WRAP intervention is 11.52, while the post intervention score reads at 7.77. This clearly indicates a reduction in reported levels of anxiety for the MH experimental group, post WRAP intervention. The anxiety levels for the MH control group, is recorded at 10.77 pre, and 11.13 post, showing an increase in anxiety over time, for the non-experimental wait-list control group.

The Depression score for the Mental Health experimental group indicates a mean of 8.64 pre WRAP intervention, and a post score of 5.24. This suggests the WRAP intervention as indicative of having a positive impact in reducing reported depression levels. Results for the mental health control group proposed 7.29 pre, and 8.10 post.

**Research Question 3 : Does participants' knowledge of recovery increase, as measured by MHRM?**

With regard to the ABI experimental group, the pre-WRAP intervention mean score is recorded at 70.1 on the MHRM, while the post treatment score is 81.1. This indicates an improvement in knowledge of recovery for ABI participants in receipt of the WRAP intervention. In the case of ABI control group participants, the mean score drops slightly, from 78.41 pre to 76.88 post.

Results appear similar for the Mental Health group. The mental health experimental group mean, shows an increase from 71.67 pre to 81.0 post WRAP intervention. This similarly indicates an improvement in knowledge of recovery, for participants in receipt of the WRAP intervention. The corresponding control group shows little, though some increase, with a pre score mean of 70.35 and post mean of 72.19.

Repeated measures analysis of variance, show these increases to be highly statistically significant. Post hoc ‘t’ tests, demonstrate the significant increase in knowledge scores
(t=5.6, p<.0001). However, improvements for the Mental Health group while statistically significant, are somewhat less, (t=1.69, p<.05). Based on these analyses nonetheless, it appears that question 3 may be answered in the affirmative.

**Research Question 4: Did participants’ overall knowledge of WRAP and sense of wellness increase, as a result of participating in the WRAP intervention, as measured by the modified Copeland WRAP scale.**

With regard to the ABI experimental group, the pre-WRAP intervention mean score is observed at 8.03, while the post treatment mean score is 4.33. Since the WRAP measure is negatively scored, this implies a successful WRAP intervention, as indicated by a decrease in score. The ABI control group mean scores did not differ pre and post WRAP intervention (4.94 pre v 4.82post). This indicates no change in the control groups’ reported state of wellbeing as well as their knowledge of WRAP. Since control participants were not exposed to any previous WRAP intervention, these results are unsurprising to an extent.

The case was similar for the mental health experimental group, recording a decrease in mean score, from 6.07 pre to 1.74 post WRAP intervention. Once again, this indicates a positive effect pertaining to WRAP group participation. The corresponding control group shows no change, with a pre score mean of 4.83 and post mean of 4.82.

Repeated measures analysis of variance, show these increases to be highly statistically significant. Post hoc ‘t’ tests, demonstrate the significant increase in knowledge scores, for both the ABI group (t=3.47, p<.0005) and for the Mental Health group (t=6.75, p<.0001).

**Research Question 5 : Is the impact from participation in WRAP more positively evident in the Mental Health experimental group, than for the ABI experimental group?**

This question was considered on the basis of memory, attention and concentration difficulties, frequently observed in persons with ABI. All four scales; HADS Anxiety, HADS Depression, WRAP Copeland Scale and the MHRM were consulted.
Results are shown in Table 3 below:

<table>
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<th>MEASURE</th>
<th>ABI mean</th>
<th>ABI sd</th>
<th>MH mean</th>
<th>MH sd</th>
<th>‘t’</th>
<th>df</th>
<th>P (2-tailed)</th>
</tr>
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<td>3.85</td>
<td>4.1</td>
<td>2.37</td>
<td>41.6</td>
<td>0.022</td>
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<td>HADS depression</td>
<td>1.72</td>
<td>1.98</td>
<td>3.62</td>
<td>4.28</td>
<td>1.89</td>
<td>26.2</td>
<td>0.07</td>
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<td>3.04</td>
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<td>MHRM</td>
<td>10.93</td>
<td>9.07</td>
<td>9.33</td>
<td>12.15</td>
<td>0.56</td>
<td>47.8</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Table 3: Mean & SD. of Before/After Difference scores for ABI and MH experimental groups, with independent samples ‘t’ test.

Repeated measures ANOVA show highly statistically significant effects for each of the four measures. In order to address the question sufficiently, we use post hoc ‘t’ tests. This will ascertain if the mean difference between before treatment and after treatment scores, differ significantly between the ABI and MH experimental groups.

Table 3 shows that the mental health experimental WRAP intervention group, shows a greater decrease in HADS anxiety and depression scores than the ABI experimental group. However, with regards to assessing statistical significance, this difference is large enough only for HADS anxiety. With respect to WRAP and MHRM, no differences in improvement were observed between these two groups. Therefore, contrary to what was proposed in Question 5 as being a possible outcome, there appears little evidence of a difference in the impact of WRAP between the ABI and MH experimental groups. Uptake for both groups therefore appears positively similar.
References:


Chapter 4 : Discussion

“The goal of recovery is not to become normal. The goal is to embrace the human vocation of becoming more deeply, more fully human.” (Deegan, 1996)

Broad Reflection:

Recent years have established a growing commitment, towards adopting a recovery based approach to mental health (Allott, Loganathan, & Fulford, 2003). Recovery is usually taken as broadly equivalent to ‘getting back to normal’ or ‘cure’, and by these standards few people with severe mental illness recover. At the heart of the growing interest in recovery is a radical redefinition of what recovery means to those with severe mental health problems. Redefinition of recovery as a process of personal discovery, of how to live (and live well) with enduring symptoms and vulnerabilities, opens the possibility of recovery to all. The ‘recovery movement’ purports that this reconceptualisation is personally empowering, raising realistic hope for a better life alongside whatever remains of illness and vulnerability (Roberts & Wolfson, 2004).

Parallel with this mounting interest in recovery, there is also an increasing emphasis on self-help, self-management, and mutual support (Scogin, Hanson, & Welsh, 2003). Indeed, there is every indication that self care and self management is ‘an idea whose time has come’ (Hill, Roberts & Igbrude, 2010). Self management is not another treatment, but a means of people becoming more active in their own recovery, taking up more responsibility for their experience and regaining more authority and control over their lives (Hill et al, 2010). Self help and self management vary in their approach styles, but similarly offer a potentially consistent way to explore key concepts of recovery. Such concepts include personal responsibility, education, hope, self advocacy and support, through client self-directed interventions (Pratt, McGregor, Reid, & Given, 2013).

A formalized version of self-management that emerges from the experience of lay people, is Wellness Recovery Action Planning (WRAP). WRAP was developed in the USA by a user of
mental health services, Mary Ellen Copeland. Essentially, it is a non-professionally developed recovery approach, based on self-management with a view to improving mental health and wellbeing (Copeland, 2002). WRAP has been widely disseminated and is offered in every U.S. state and territory, as well as Canada, England, Scotland, Ireland, Japan, Hong Kong, New Zealand and Australia (Cook et al., 2011). Although its growth appears rapid, with many positive anecdotal reviews, a comprehensive review of the literature for the purpose of this study, identified a distinct paucity of published studies with documented WRAP outcomes. The need for evaluative studies thus appeared pressing, and although this generated initial personal concern, I forged ahead undeterred, confident that this study would distinctly add to the existing body of WRAP research.

**Preliminary Summary of Present Study Findings**:

This study examined the effectiveness of a WRAP intervention with mental health and acquired brain injury populations. A total sample of 105 individuals participated, each attending the National Learning Network, Ireland. Research took place in five separate training locations of the National Learning Network (NLN). NLN is a training and specialist support provider for people presenting with various challenges, thus finding it difficult to access the labour market. Using a pre and post questionnaire design, pre and post measures were established for those receiving the WRAP intervention. Corresponding control groups were also included for each sample population.

As outlined in Chapter 3 results of the study yielded impressive outcomes for WRAP participants. To begin, an overall reduction in Depression and Anxiety was observed post WRAP participation, as measured by the HADS. Between group comparisons indicated that WRAP experimental group participants, reported less anxiety and less depression post WRAP intervention. There were no such improvements for respective wait-list controls. This was the case for both ABI and Mental Health participants, with the difference between conditions even more pronounced for the mental health experimental and control groups,
Participants’ knowledge of recovery and its relevant components, was measured by the MHRM. This similarly indicated improvement post WRAP participation, with post hoc ‘t’ tests demonstrating a significant increase in knowledge scores (t=5.6. p<.0001). This apparent increase in knowledge of recovery was the case for both ABI and Mental Health participants, although somewhat less statistically significant for the mental health group (t=1.69, p<.05). Most participants had not come across the concept of recovery before this experience and found that this offered a useful, powerful and new perspective on their journey and experience. Participants described feeling they could take ownership over their well-being and were able to challenge stigma to the point where they could talk about their experiences, sometimes for the first time.

The modified Copeland Scale measured participants’ knowledge of WRAP and overall sense of wellness post WRAP participation. Results from this, indicated a positive and significant effect pertaining to WRAP participation for both groups. The group setting appeared to provide optimal conditions for WRAP delivery, while the provision of mutual support appeared to enhance the recovery-orientated principles of WRAP. Mutuality offered a supportive, caring environment, and it was viewed as being particularly positive that facilitators were also able to share their experiences.

Finally, WRAP participation was questioned in light of whether or not it would demonstrate greater impact for those with mental health difficulties than those with ABI. This was considered in light of frequently observed concentration and attention difficulties in ABI survivors, which can potentially impact on group participation and engagement. On the contrary, little evidence was observed in any of the four pre and post measures, however, delivery modifications were necessary in the case of ABI (later discussed).
Preliminary Summary within the context of Previous Research:

The evidence thus referred appears in consonance with, and complimentary to that of previously illustrated studies. In the incidences of Cook et al (2009) and Cook et al (2010) (see Chapter 1), these studies appeared to employ outcome measures more strictly related to the inherent WRAP process, e.g. knowledge of recovery, skill in recovery application, and levels of hopefulness post WRAP participation. Results in each, purported WRAP as an effective recovery tool towards maintaining positive wellbeing.

The present study similarly examined knowledge of recovery principles and application of WRAP wellness tools, via The modified WRAP Copeland Scale. Post results indicated worthy promise, consistent with that of the aforementioned studies. Furthermore, the present study examined outcomes for anxiety and depression using the HADS measure. Positive results on these scales indicated the success of the WRAP intervention, as evidenced by the participants’ lowered anxiety and depression scores.

In addition, the use of waiting list control groups in the present study, generated a basis for comparison not evident in the Cook et al., (2009) and Cook et al., (2010) studies. Fukui et al., (2011) was the first evaluation of WRAP which included a control group, as well as planned comparisons, before and after the intervention. Similar to the present study, Fukui’s results indicated statistically significant group intervention effects, with experimental group participants experiencing reductions in symptoms of mental ill-health, post WRAP participation.

The inclusion of an acquired brain injury (ABI) sample (in addition to mental health samples) additionally provided a novel aspect to the present research. Despite previous claims that WRAP could be used ‘with any population’ (Davison, 2005), previous research demonstrated no evidence to support this claim with respect to ABI. The results emanating from the
present study nonetheless, suggest positive effects pertaining to the use of WRAP within the context of ABI.

**Broader Contextual Reflection:**

Recent years have offered a new evidence base is emerging, which focuses on well-being and the promotion of well-being, as distinct from the more traditional approach of simply treating illness. Towards this end, the academic discipline of positive psychology is developing evidence-based interventions to improve well-being, which complements the results emerging from the synthesising narratives about recovery from mental illness (Slade, 2010).

Positive Psychology is the science of what is needed for a good life (Slade, 2010). This concept is not a new focus. Indeed, the qualities considered necessary in order to enjoy a good life were proposed initially by Aristotle, in his investigation of eudaimonia, as well as in the seminal works of Carl Rogers (Rogers, 1951) and Abraham Maslow (1954). “The organism has one basic tendency and striving - to actualize, maintain, and enhance the experiencing organism” (Rogers, 1951, p. 487). The emergence of a scientific discipline in this area nonetheless, is a modern phenomenon. Martin Seligman, as one of the founders of Positive Psychology, proposes the following definition:

*The field of Positive Psychology at the subjective level, is about valued, subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At an individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skills, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom. At the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic.* (Seligman & Csikszentmihalyi, 2000).

Of note in this definition, is its relative distancing from the prevailing preoccupation of Clinical Psychology, to study pathology, weakness and damage. In his 2010 article on the
central importance of positive psychology and recovery approaches, Slade (2010) poses that an implicit, and sometimes explicit dichotomous assumption, is that healthy people will benefit from positive psychology, whereas people with mental illness will continue to require “negative psychology”. There is however, no evidence to support this assumption. Moreover, the convergence of narratives from people with mental illness, around key positive psychology themes (e.g. meaning, agency, empowerment, hope and resilience) indicates that the opposite may be true (Slade, 2010). Proponents of the recovery model would argue that “The existence of pathology is not equivalent to weakness and damage, and should not preclude a focus on what is healthy. The benefits of positive psychology might be even greater for people with severe psychiatric disabilities, than for those without such impairments.” (Resnick & Rosenheck, 2006, p. 121).

This suggests a need for more studies and empirical research, to confound and give weight to statements such as the aforementioned. The relative small amount of empirical recovery research, has in general used inductive methods, such as collating and synthesising narratives. This is consistent with an emphasis on individual meaning and experience, since grouping the responses of participants necessarily reduces the granularity of analysis (Slade, 2010). However, the consequence of this, is difficulty in making the intellectual case to clinicians to change the mental health system, who tend to value nomothetic group-level evidence. This had a relative bearing on my chosen method of analysis, since I wished to be suitably positioned to inspire and influence change among clinicians, and other potentially influential individuals alike.

Positive psychology by contrast to recovery-focused research, is unequivocally based on empirical research, and has not avoided the use of nomothetic approaches, even to assess complex constructs such as meaning of life (Pohlmann, Gruss, & Joraschy, 2006). Indeed, it has been criticised for under-use of qualitative methods (Morgan, 2007). The result is an academically credible scientific discipline (Snyder, 2002), whose evidence is based on robust scientific methodologies (Ong & van Dulmen, 2006). It has not however, yet been highly influential in international policy (Slade, 2010) Why has there not been a greater
rapprochement between these two, apparently compatible groups? Resnick & Rosenheck (2006) posit that this may be because of their differing aims: “Positive Psychology is an intellectual movement, led by prominent academic psychologists, that challenges the dominance of negative psychology, whereas recovery is a grassroots movement of the disenfranchised, that has placed itself apart from human service professions, the academy, and the empirical research tradition.” (p.121)

In considering the above factors, coupled with my interest in examining, what appears to be an integrative, successful, as well as novel recovery approach, I set about evaluating WRAP from an empirical research perspective. The results, as outlined earlier were noteworthy, and while on the one hand, it was unsurprising to me that WRAP generated such a positive impact, the research was not without its limitations (later discussed). For now however, I wish to elaborate more fully and reflect on my main research findings.

**Reflective and Integrative Research Findings:**

There is a distinct paucity of published research on WRAP. While recovery literature is quite easily accessible, and much is offered in terms of the components of holistic recovery, the actual mechanics of ‘how’ an individual reaches this point, appears somewhat lacking in empirical evidence. Most people who may be described as in recovery from mental ill-health, neither think nor talk about the term ‘recovery’. Rather, they speak of gaining employment, making friends, living independently, developing or resuming skills and hobbies, and generally getting their lives back on track. It would therefore make sense, that the process by which these important markers become effective reality for an individual, is meaningfully suggested and extensively researched.

WRAP, as we are now aware, is a self-management tool towards maintaining mental health and recovery. The existing, minimal research in the area of WRAP, has examined its overall effects as a recovery wellness tool, as well as examining specific areas such as hope, empowerment and self advocacy (Cook, Copeland et al, 2009; Starnino et al., 2010). WRAP is being used in a variety of settings both nationally and internationally, and there are
considerable anecdotal reports suggesting that it is a useful tool for managing a variety of emotional, psychiatric and physical disabilities (Copeland, 1997).

The present study used a quasi-experimental design (non-equivalent groups design, in which group assignment is not random) to examine the effects of WRAP on ABI and Mental Health sample populations. The question of whether or not WRAP would have a potential impact on the Depression and Anxiety levels of such groups was considered. This was answered affirmatively, by way of control group comparisons for each respective sample population, and while I may maintain somewhat of an ‘experimenter bias’ (Rosenthal, 1994), the significance of the results were for me, unsurprising.

The findings with respect to the mental health sample, supported those of Cook et al., (2012) in their published study, “An RCT of Effects of Wellness Recovery Action Planning on Depression, Anxiety and Recovery”. Theirs, was the first randomized controlled trial, which demonstrated that WRAP has a positive and sustained impact on feelings of depression and anxiety, as measured by The Brief Symptom Inventory, (Piersma, 1994). Outcomes for this study were also reported as being superior to those achieved by usual treatments for anxiety and depression (Cook et al, 2012), and were further corroborated by Cooke et al’s earlier (2011) WRAP study. Fukui et al., (2011) in their investigation of the impact of WRAP on self-reported psychiatric symptoms among people with severe and persistent mental illness, was the first evaluation of WRAP that employed a comparison group and follow-up measurement. The Modified Colorado Symptom Index, the State Hope Scale, and the Recovery Markers Questionnaire were employed at the first and last WRAP sessions, as well as six months following the intervention. Repeated measures analysis of covariance and planned comparisons before and after the intervention, indicated statistically significant improvements for the experimental group in psychiatric symptoms and hope after the WRAP intervention, but not for the Recovery Markers Questionnaire. Planned comparisons showed statistically significant improvements for the experimental group in psychiatric symptoms and hope after the intervention, while non-significant changes occurred in the comparison group (Fukui et al., 2011).
This study offers promising evidence with regard to the positive effect of WRAP participation, on psychiatric symptoms and feelings of hopefulness. It also supports the findings of Cook et al.’s (2009) initial outcomes study, which reported improvements in overall recovery, as well as hopefulness among WRAP participants. While Cooke et al., (2009) found a significant decrease in overall global symptom severity, Starnino et al., (2010) in their study on ‘Outcomes of an Illness Self-Management Group Using Wellness Recovery Action Planning’, did not find a statistically significant improvement in symptoms. Of note however, is that the participants did show a positive trend in symptom improvement which approached significance (Starnino, 2010). The findings of these studies, provide strong, corroborative support to the present study. The combined effects of such preliminary evidence (worthy of further research exploration) may be that WRAP warrants an established position in the current array of mental health services.

Jonikas, Grey, Copeland, et al., (2013) in their study examining the propensity for improved patient self-advocacy, following receipt of WRAP, as compared with those who received the usual care, showed promise. In a multivariable analysis, at immediate post-intervention and 6-month follow-up, WRAP participants were significantly more likely than controls to report engaging in self-advocacy with their service providers. Higher self-advocacy was also associated with greater hopefulness, better environmental quality of life, and fewer psychiatric symptoms among the intervention group (Jonikas et al., 2013). These findings provide additional, recent support for the positive impact of peer-led self-management programs such as WRAP, on mental health recovery.

But what of acquired brain injury? I decided to include the effects of WRAP in the context of ABI, as well as mental health. This was in light of Copeland’s claim that WRAP is a useful tool for managing a variety of emotional, psychiatric and physical disabilities (Copeland, 1997) as well as Davidson’s 2005 declaration, that WRAP has the potential to be applied to any person or condition. This includes substance abuse, depression and various other mental health conditions (Davidson, 2005). Depression and anxiety are frequent symptoms reported, following an acquired brain injury (Busch & Alpera, 1998), while lower levels of
self-esteem are related to greater levels of self-reported depressive and anxiety symptoms, in early stage stroke survivors (Vickery, Sepehri, Evans, et al., 2008). These are also conditions I frequently observe in the context of my work with ABI clients at the National Learning Network.

Upon extensive examination of the research literature, I could find no evidence of any documented studies of WRAP having been used in any other context, other than mental health. This gave me additional impetus for including the ABI sample. The ABI dimension appeared to me, quite ‘cutting edge’ in terms of adding to the existing body of recovery research literature on WRAP. I thus aspired to be in a position to make a valued and worthy contribution with regard to the effects of WRAP, both with mental health and acquired brain injury populations. Shortly after beginning my intervention however, I discovered that ABI control participants were proving more difficult to come by than I had originally anticipated. Arriving at my LCU 2012 review, with just four control ABI participants, I strongly considered abandoning the ABI aspect altogether. Fortunately, following discussions with my supervisor, I was encouraged to persevere with my original design, finding alternative ways to get around this apparent sample limitation.

**Further Discussion of The Present Study :**

Between group comparisons for the present study, indicated that participants had less anxiety and less depression post WRAP intervention than their wait-list counterparts. Although the difference between conditions was even more pronounced for mental health than ABI experimental and control groups, the results nonetheless indicate, that WRAP has the potential to offer a unique and useful self-management approach, to individuals post ABI.

Inspired by Cook et al., (2012), the following are a list of suggestions, combined with personal reflections and observations, which may contribute to the positive changes observed in participant outcomes, post WRAP intervention : Creation of daily maintenance plans, such as establishing routines for taking prescribed medications, exercising to boost
serotonin and endorphin levels, maintaining good nutrition for mood stabilization, socialising with others, and allowing for sufficient sleep and rest, may singularly or collectively, assist participants in developing positive routines. Such daily rituals may also assist in preventing symptom onset of depression and anxiety. The identification of specific triggers for negative thoughts and feelings, may enable participants to avoid situations and/or people which previously may have resulted in their feeling depressed or anxious. Awareness of early warning signs of sad or anxious feelings, along with targeted coping strategies, such as cognitive restructuring or written recording of upset feelings, may help participants better manage symptoms once they emerge, thus prevent their worsening. Crises and post-crises plans may lead to better adjustment, and less anxiety for participants, due to an increased sense of control over one’s life. Finally, interactions with credible role models in the form of WRAP facilitators, as well as experiential sharing with fellow participants, may serve to enhance participants’ belief in their own ability to self-manage their lives. The combined result of all of the above, may indeed very positively lead to participants’ increasing perceptions of recovery and lowered feelings of depression (Cook et al., 2012).

My personal view (as distinct from anything established objectively), is that the most powerful instigator of change with regard to the WRAP intervention, is the environment in which the intervention takes place. Within the WRAP context, both facilitators and participants maintain a similarly equal footing, which allows for open communication to take place, in a non-judgmental, positive atmosphere. Through creation of such a nurturing, acceptant space, individuals are empowered to reconnect with their inner wisdom (Rogers, 1957). Barriers are thus removed and individuals feel more liberated to honour and pursue their lives, and unique recovery journeys. All participants in the study anecdotally spoke of their sense of “feeling valued and respected” in the group, with the level of personal disclosure and honesty enabling them to feel “less fearful “and “more empowered” to tell their stories, “warts’n all”.
Higgins et al., (2011), in their evaluation of mental health recovery and wellness recovery action planning (WRAP) in Ireland, suggest that involvement of people with personal experience, family members, and mental health practitioners, increases partnership skills and serves to challenge professional orthodoxies and power. The present study did not incorporate family members, nor was the WRAP intervention led and facilitated by service users. Rather, myself, a Psychologist, and my colleague, a Psychotherapist, led the groups. As facilitators, and having completed our individual WRAP plans, we positioned ourselves as equals with the participants of the group. In so doing, participants were enabled to view us as both human beings as well as professionals. This facilitated the transcendence of labels and stereotypes most often associated with mental illness, and the realization that everyone is on a unique journey of becoming, each experiencing personal successes as well as setbacks from which we can collectively learn.

In relation to participants’ knowledge of recovery and its relevant components (as measured by the MHRM), the present study indicated improvement post WRAP participation. This apparent increase in knowledge of recovery was the case for both groups, though somewhat less statistically significant for the mental health group. In considering this minor statistical disparity, it occurred to me that mental health participants, by virtue of their diagnoses, may perhaps have been more predisposed to self-reflective practice and recovery paradigms, than their ABI counterparts? In any event, recovery in most cases is not viewed as a destination point at which one arrives, but rather as an ongoing process which incorporates body, mind and spirit. No one approach works or ‘fits’ all, and there is no one right way for an individual to recover. As Perkins & Repper (2003) purport, recovery is not about ‘getting rid’ of problems. It is about seeing people beyond their problems – their abilities, possibilities, interests and dreams – and recovering the social roles and relationships that gave life value and meaning. The simple realization of this concept became apparent from undertaking this study. Participants began to see beyond illness, aspiring fearlessly to goals and ambitions despite perceived or apparent limitations. This increasing confidence, coupled with feelings of being validated and accepted by other WRAP participants, seemingly became a powerful and potent force for the recovery journey of participants in this study.
With regard to participants’ inherent knowledge and overall sense of wellness and recovery, post WRAP, findings of this study indicated a positive and significant effect for both groups. This was measured by the Modified WRAP Copeland Measure, which reflected a positive impact in scores pertaining to maintenance of daily wellness plans, identification of triggers and early warning signs, crisis and post-crisis planning, and general increased engagement with life activities. This supports the findings of Higgins et al., (2012) who reported WRAP as having a positive influence on participants’ awareness of identifying stressful triggers, and ability to access internal resources.

Other evaluations have reported similar positive findings. These include, an important perceived increase in knowledge of tools for coping with early warning signs and distress, increased understanding of how to create a WRAP crisis plan, ability to advocate successfully for one’s needs and wishes, and an ability to more easily engage in recovery-promoting activities (Buffington (2003); Culloty (2005); Doughty et al., (2008)).

The final research question of the present study, considered whether or not WRAP participation would demonstrate greater impact for those with mental health difficulties than those with ABI (as measured by all 4 questionnaires). Little evidence in the findings of this study supported this considered outcome. Within the context of ABI as well as during the course of my work, attention, concentration, memory difficulties, as well as insight and awareness, often pose as limitations for individuals with ABI. Such challenges, coupled with no apparent research of its kind, informed my decision to include this ABI comparative group. Results were unremarkable, other than to perhaps re-iterate what Copeland (1997) posited : WRAP is indiscriminate with respect to whom it most benefits, and therefore can be used by any individual or population. On the basis of the results indicated in this study, (bearing in mind certain necessary adaptations) this would indeed appear to be the case.
General and Specific Limitations of The Present Study:

Recovery is non-linear:

There are limitations nevertheless. Firstly, the recovery process is non-linear (Fukui et al., 2011). The mental health recovery experience is a long process and does not reflect a linear path. Recovery is a unique, individual journey, encompassing times of growth, euphoria, setbacks and flat-lines. In order to capture such non-linear growth, an increased number of varying participants and time points may be required for review. The present study did not include follow-up measures. Follow-ups would serve to establish whether or not participants in receipt of the WRAP intervention, continue to use its strategies for maintaining positive mental health and wellbeing, and whether or not such methods continue to remain effective. Correspondingly, this would be reflected in their maintenance of lowered anxiety and depression levels, which were observed in this study, immediately post WRAP intervention.

Experimental Conditions:

The experimental conditions of the present study involved heterogeneous groups, and conditions were not constant across each group. In the case of the ABI groups, the length of time required to complete the WRAP intervention was longer than for the Mental Health participants (8 wks: MH. v 10 wks: ABI). This was due to the necessary repetition and reinforcement of material required with ABI participants, which resulted in a lengthier delivery time. Within this context, it should be considered, whether or not exactly matched conditions, would have resulted in less impressive outcomes for the ABI sample population? This is clearly an ethical dilemma. Do we deliver an intervention with the expressed intent of controlling conditions to such an extent as to insight a ‘perfect’ piece of research? Or do we attempt to control conditions in as much as possible, while not forgoing individuals’ needs, by amending experimental conditions where appropriate? In the case of this research, I evidently chose the latter. Nonetheless, the point raises an important question with respect to WRAP fidelity and research protocol. At the time this research was conducted, no such defining protocol existed. Guidelines for generic delivery are indeed
offered. However, lack of systematic monitoring of the intervention, may potentially give rise to variation in quality control between groups. The development of a WRAP fidelity measure would therefore considerably add to future professional and ethical standards of WRAP based research.

As outlined in the methodology section (Section C) of this study, one of the instruments for measuring the impact of WRAP, proved troublesome for participants. This resulted in my having to abandon use of this measure, which ultimately was time-consuming for both participants as well as myself. The questionnaire was that which was used in an Irish study by Higgins et al., (2011), in conjunction with the Irish Mental Health Recovery and Education Consortium (IMHREC). This questionnaire was indicated to have successfully evaluated their 2 and 5 day WRAP education programmes, while similarly capturing participants’ attitudes towards recovery. Participants included people who had personal experience of mental health problems, practitioners in mental health services, and family members/carers of those with mental health problems. Inspired by the successful outcome of this study, coupled with it being the first of its kind in Ireland, to have formally evaluated WRAP, this informed my decision to include the questionnaire.

Interestingly, though perhaps unsurprisingly, the individuals for whom the questionnaire proved most problematic in the present study, were those in the ABI groups. ABI participants complained of the questionnaire being ‘too long’, and ‘too wordy’, resulting in the return of many spoiled questionnaires from this group. Although the Mental Health participants reported less difficulty with the measure, they did however express dissatisfaction at the length of the questionnaire, and the duration required for completion (approx. 12 minutes). Perhaps, it was the concentration and motivation requirements of the questionnaire, coupled with there being 3 other measures to complete which somewhat defeated certain participants of the present study. Nonetheless, in the context of the participants included by Higgins et al., (2011), i.e. people who had personal experience of mental health problems, practitioners in mental health services, and family members/carers of those with mental health problems, the questionnaire reportedly posed little or no
difficulty. Careful consideration of measures, in the context of included samples is therefore paramount to both assessing and reviewing WRAP effectiveness.

**Generalisability:**

Other limitations of the study include its generalisability. The study sample rationale was largely influenced by a desire to evaluate my work with clients as a professional Psychologist, and similarly evaluate the effectiveness of WRAP with such clients. However, logistical and convenience sampling also entered the decision-making and framework. While control groups were included (adding a certain credibility to the indicated positive impact of WRAP), the sample was nonetheless, non-randomized.

On the basis of control group comparisons of the present study, WRAP participation, demonstrated positive outcomes for both mental health and ABI participants, with the intervention effect somewhat marginally more remarkable for the mental health participants. Further research is required however, with similar inclusion of control groups, to add weight to the exclusive effects of WRAP. In this context, it is possible that simply by virtue of being on a training programme of the National Learning Network, learning new skills, honing old ones, addressing specific personal challenges, as well as meeting other like-minded individuals, may have effected positive change, regardless of WRAP participation. Isolating and controlling for such variables may in this sense, offer an enhanced research challenge.

Although the outcomes of the present study, were somewhat more pronounced in the case of mental health experimental and control groups, than their ABI counterparts, the results nonetheless indicate that WRAP has the potential to offer a unique and useful self-management approach, for both populations. Of note, was the zero drop-out rate with respect to all WRAP participants in this study (with the exception of one individual, who left due to securing gainful employment), which in essence, speaks for itself. WRAP appears to
hold the intervention ‘likeability factor’, perhaps due to its simple, straightforward approach and functional applicability to everyday life. Lack of empirical research pertaining to WRAP however, particularly in the area of ABI, makes it difficult to draw any firm conclusions. If the claim that WRAP can be used with any individual or condition (Davidson, 2005) is to receive more widespread credibility, further research needs to focus on substantiating and providing varied empirical evidence to this effect. Adaptations such as those outlined above, will also need addressing, relative to the experimental groups and conditions under review.

Specific considerations relating to the ABI sample:

With regard to individual sample groups, the present study recruited people with ABI who were functioning within the mild to moderate range of ability. If the selected sample were more severely mentally or physically impaired, this would most likely have negatively impacted on findings. Copeland’s (1997) claim that WRAP may be used with any population, may therefore require an additional caveat. Certain modifications, adaptations and revisions need to be made to WRAP delivery, when extending beyond the borders of mental health. For example, the duration of the WRAP programme. As previously outlined, the ABI population in the present study required 10 weeks for completion, as distinct from 8 weeks for the mental health group. In more severe cases of ABI, the length of time for completion may be even greater, as in cases where individuals present with for example, aphasia or other speech and language disorders following an ABI. Such instances of receptive and/or expressive language difficulties, would require additional time as well as more simplified, concrete adaptations of WRAP. Other more physical, neurological side-effects of ABI e.g. impaired or reduced upper-limb mobility, paresis, blindness, agraphia, would similarly require purposeful adaptations, e.g. individuals may need to ‘voice-record’ their WRAP plans, or avail of a scribe to record their WRAP content information.

A similar situation arises where insight and/or motivation difficulties arise following an ABI. Ofrei, Robinson, Prigatano et al., (2007) present a review of ‘anosognosia’, the lack of awareness or underestimation of a specific deficit, following an ABI. Such lack of insight
may potentially result in an ABI participant’s inability, to reflect on ‘how I am when I am well’ or to identify specific ‘triggers’ and ‘early warning signs’ as proposed by WRAP. Lack of motivation may similarly result in difficulty with the execution of suggested daily wellness tasks. Indeed, Hill et al., (2010) in their WRAP study, give further credence to this notion. In this study, workers highlighted insight, understanding and motivation, as key mediators for WRAP participation, suggesting that formulation of a self-management plan such as WRAP, is perhaps best done when someone is comparatively well, and able to reflect on their experience (Hill et al., 2010). Although Hill’s study was not inclusive of an ABI population, their study nevertheless highlights perhaps optimal conditions for completion of WRAP within the recommended time-frame. If on the other hand, particular characteristics of the sample population, present certain challenges or limitations (as was the case in the present study), this may require specific, additional adaptations, relating to designated time-frame, adapted presentation of information, optional family inclusion and feedback, and/or additional one-to-one therapy. At present, no such adaptations or modifications are considered in the literature, despite WRAP being touted as an approach suitable for use with any individual or population (Copeland, 1997; Davidson, 2005).

Data Collection and Researcher Bias:

Data collection also needs consideration. It is possible that the different methods of data collection in this study (face-to-face v mail), using self-report measures, may have caused a response bias, including social desirability effect and interviewer bias. Improvement was observed to be much less remarkable for control groups, some of whom completed questionnaires via mail, while significant improvement of outcomes pre and post were observed for WRAP experimental groups. Since those who received the WRAP intervention, completed questionnaires face-to-face, the possible impact of social desirability bias and interviewer bias, must be considered. Participants already knew me as the Psychologist attached to their centre, and while every effort was made to minimise response bias (see Methodology, Chapter 2) it is inevitable this may happen. Indeed, Rosenthal (1994) in his groundbreaking work on experimenter effects, purports that the experimenter, through
belief, dress, age, gender, appearance and personality, can actually affect the behaviour and hence outcomes of studies in unconscious and unwitting ways.

This could be argued in the case of clients initially signing up to do the WRAP programme. Individuals may have felt somewhat influenced or even obliged to sign up, given my being the Psychologist attached to their centre. Despite vehement reassurance to the contrary, one solution to this dilemma, might involve employing a Psychologist from another region, to deliver WRAP in centres where they would normally have no other involvement. This would not guarantee either, immunity from potential experimenter effects however, and the additional impacting costs to the organisation, would most likely be met unfavourably. A more amenable alternative perhaps, may be for service-users who themselves are WRAP trained, to facilitate and lead WRAP groups, as initially proposed by Copeland (1997). This however, also has risk implications.

**Risk, Recovery and WRAP:**

A frequently expressed concern about recovery, involves issues of ethics and risk (Davidson, 2006). Mental health service providers suggest that mental illness is different from other illnesses, because of the issue of risk. Questions such as ‘does increasing client choices increase provider risk ?’ surface. Providers ask how it’s possible to promote client choice and self determination on one hand, while holding the same services responsible for occurrences of adverse events on the other. The ethics of focusing on the strengths, hopes and dreams, while an individual is faced with such basic and urgent needs as safety, security and shelter, are therefore called into question.

Davidson, O’Connell, Tondora, et al., (2006) propose that recovery requires reframing of the treatment enterprise, from the professional’s perspective to the person’s perspective. The issue is therefore not what role recovery plays in treatment, but what role treatment plays in recovery. This shift in perspective, has important implications for how we conceptualize
and deliver services. For example, if we accept the premise that mental illness is a condition that many people can learn to accept and live with, our emphasis on choice and self-determination become imperative, as opposed to optional. Davidson asks, “How else can people learn to manage their condition in particular, and their lives more generally, if they are not allowed to make their own decisions?” (Davidson, 2006). By extension, Mulvey (1994); Monahan & Arnold., (1996) purport that the majority of people with mental illness pose no risk to the community. Indeed, surveys have shown that this population is more likely to be victimized, than to victimize (Dailey, Chinman, Davidson, et al, 2000; Sells, Rowe, Fisk, et al., 2003). These findings suggest that people should be presumed innocent until proven otherwise. Within the realm of choice, this presumption means being allowed to make one’s own decisions unless and until there are clear and persuasive grounds for imposing restrictions on this most fundamental of our civil rights (www.ncd.gov). If mental illness is therefore an illness like any other, it should be treated as such, by medical staff as well as by the general public (Davidson et al., 2006).

This has important repercussions for service providers and professionals alike. A core principle of the recovery paradigm, is the appropriate application of the established construct of informed consent. In adhering to this principle, it is ideally left up to the person and his or her significant others, to make informed decisions about treatment and care. It is therefore not the practitioner’s role to make such informed decisions for the individual, rather the individual themselves. By implication, it has been suggested that the recovery-oriented approach in some way devalues, dilutes or disregards the knowledge of the professional. Davidson et al., (2006) suggest the contrary, insisting that this approach brings psychiatry closer to the other medical specialties. Engaging and supporting people in self-care is a required competency within the emergency core curriculum for psychiatrists (www.rcpsych.ac.uk) and an acknowledged key skill in recovery-based practice. In this way, it is the specialist’s role to assess the person’s functioning, diagnose his or her condition, educate the person about the costs and benefits of the available effective interventions to treat the condition, and finally with provision of informed consent and permission to treat, competently provide the appropriate interventions. (Davidson et al., (2006)). Bodenheimer, Lorig, Holman, et al., (2002) conclude that patient education
programmes teaching self-management skills, produce superior outcomes to programs teaching medical information alone. We as practitioners may therefore need to surrender some of our power and authority, in order to create more service-user led opportunities for personal choice and recovery advancement.

But what of exceptional circumstances? One of the obligations of public mental health care systems is to protect the community. In situations which involve persons who pose some degree of risk, either to themselves or another, emergency procedures must be considered and taken. Such instances demand the issue of informed consent and permission to treat, be temporarily suspended, in favour of adopting the necessary and appropriate life-preserving measures. This is in adherence with the standards and guidelines of professional ethics, as proposed by BPS, PSI and other professional bodies. Such cases pose important questions and challenges to the recovery-oriented approach, as well as highlighting the importance of having robust risk management and assessment procedures in place.

As one of the main recovery self-management approaches, as well as a focus point of this research, the issue of risk as it pertains to WRAP commands due consideration. For example, if we are to thoughtfully consider the proposal of WRAP being facilitated by service-users in the future, will service-users be suitably positioned to self-appoint within such roles? Or in organisations similar to where I undertook my research, will senior management be content to surrender control in such a decision making process? What becomes where there are genuine concerns relating to population risk factors?

There are strong theoretical grounds to suggest that support for self-management, may be most effective when offered by those who have experienced and overcome similar problems themselves (Hill et al., 2010). Indeed, this is the guiding principle of the UK’s “Expert Patient Programme”, where ‘experts by experience’ as opposed to simply ‘experts by training’, may be considered to be more effective and acceptable recovery coaches to service users (DOH, 2001). This is the similar vision for WRAP within the Irish recovery
context ([www.imhrec.ie](http://www.imhrec.ie)), which hopes to develop a cohort of trainers from people who themselves have already learned and used WRAP. But is this realistic? Hill et al (2010) purport that although self care and self management are prominent and valued goals of progressive services, the available models and evidence of successful outcomes is partial, provisional and largely anecdotal. Their findings indicate a modest transfer of learning from people who have been taught a self-management tool (WRAP) (Hill et al., 2010).

Ongoing systematic monitoring of WRAP is clearly required, in order to minimise and reduce risk as well as informing its continued effective and safe use. A standard template of WRAP delivery, tweaked to address the needs of particular individuals (as previously outlined), combined with clear WRAP fidelity and research protocols is similarly required. The future direction of WRAP may therefore be perhaps more realistically conceptualised as “WRAP with the essential wrapping”, as distinct from a ‘one-size-fits-all WRAP’.

**Suggestions for Future Research :**

Recent years have seen an increased emphasis on consumer directed care (Department of Health UK 2001; Mental Health Commission New Zealand 2001; Department of Health and Children 2006; Scottish Executive, 2006; Government of South Australia, 2010; President’s New Freedom Commission, 2003), but nonetheless, there is a dearth of existing research on consumer-led illness self management programmes, such as WRAP (Starnino, 2010). Since WRAP appears to be the most widely disseminated self-management approach, future research should consider using randomized control trials and longer term follow-up measures. Based on the present study, we require the overall WRAP ethos of self-direction and self-empowerment to remain, with due attention given to the unique factors, relating to specific population and location characteristics, impacting the WRAP intervention.

The present study included a purposive sample of individuals with ABI and Mental Health, attending training and rehabilitative centres of the ‘National Learning Network’. It could be
argued that such a non-randomised sample makes it difficult to infer any broad community
generalisations with respect to these groups. However, the findings were positive, giving
credence to the importance of evaluating one’s work as a professional Psychologist. This is
in accordance with the professional and ethical standards and guidelines for practice, as
directed by the PSI and the BPS, and offers encouragement for ongoing future evaluative
practice. The inclusion of control groups in the present study also adds weight any limited
generalizability of the findings. Cook et al., (2010) suggest that without control groups, we
cannot definitively attribute changes observed among participants, to receipt of WRAP. Few
studies to date have employed control groups in measuring the effectiveness of WRAP ( e.g.
Buffington, 2003; Higgins et al., 2011). Future randomised control trials as well as ongoing
replicated studies, may serve to offer a broader, more generalised and validated perspective
of WRAP.

Follow-up measures also need consideration. Collection of outcome data occurred
immediately following the WRAP intervention, in the present study. While such outcomes
were indicative of a positive outcome, absence of longer-term follow-up information
inhibits clearer determination of whether or not any observed gains were maintained over
time. Fukui et al., (2011) in their long-term research with 6-month follow-up post WRAP
intervention, indicated symptom reduction that is typically difficult to observe in shorter
term studies (Starnino et al., 2010). Incorporation of such similar measures in future
research may offer a similar, longer-term perspective.

Future studies adopting pre and post-test questionnaire designs, should pay special
attention to the purported properties of the measures employed. In the case of the present
study, two of the four measures used, were not psychometrically validated. One of these
questionnaires was chosen (after much deliberation) on the basis of it having been used by
a recent Irish study (Higgins et al., 2011). Limited information relating to its history,
reliability and validity however, led to subsequent problems when administered to WRAP
participants, and thus resulted in my having to abandon use of this measure.
The other three measures posed little difficulty, however as all instruments used in this study were self-report, the shortcomings of such need to be considered. These include inaccurate reporting and response bias. Participants may not have accurately reported their mood, anxiety levels, or levels of recovery knowledge, due to impaired insight or motivation, or because of how they wished to be perceived by the researcher (me). Where possible (and where budget allows), future studies should consider employing an independent WRAP facilitator/evaluator to measure ratings and outcomes. In the present study, self-reports were obtained from leaders of the WRAP groups (i.e. myself and a colleague) which potentially may have skewed outcome results more favourably.

The method of analysis also needs due consideration. Statistical data were used to analyse and interpret WRAP effectiveness outcomes for the present study. My chosen method of analysis, was on the one hand, largely influenced by that with which I’m most familiar. On the other, I wished to be suitably positioned, to inspire and influence change among clinicians, and other potentially influential individuals who tend to value nomothetic group-level evidence. More locally, statistics required by the funders of the organisation in which I work, would aspirationally serve to offer numerical evidence of further systems’ effectiveness, inspiring continued financial support.

In addition to further quantitative analysis, future studies may wish to additionally consider the benefits of inclusion of anecdotal and qualitative analysis. This may serve to offer a more in-depth, enhanced narrative dimension, to somewhat limited numerical findings. Cook et al., (2010) in their research on developing the evidence base for peer-led services, used ‘The method of Constant Comparative Analysis’ (Glaser & Strauss, 1967) to code WRAP participants’ comments and then group them into similar concepts from which themes were derived. Such qualitative analysis may offer an enhanced illustration of the different effects of WRAP, and the ways in which it may be perceived by participants, as promoting recovery.

Finally, the inclusion of family WRAP groups may be worthy of consideration. Higgins et al., (2011), in their evaluation of mental health recovery and WRAP in Ireland, suggest that
involvement of people with personal experience, family members, and mental health practitioners, increases partnership skills and serves to challenge professional orthodoxies and power. Although I have no experience of same, I can conceptualize the perceived benefits from a familial systemic perspective.

**Summary Reflection:**

According to the World Bank and the World Health Organisation, mental health disorders currently constitute 10% of the global burden of disease (Victorian Health Promotion Foundation, 2005). Estimates suggest by the year 2020, mental health disorders will rise to 15% of the global burden of disease, and depression alone will constitute one of the largest health problems worldwide (Murray & Lopez, 1996). More than ever, nations require effective and integrated strategies for recovery focused thinking and approaches.

Traditional clinical assessment practice, focuses almost exclusively on establishing deficiencies and the limiting characteristics of an individual. This focus on disease and deficits however, only serves to reinforce an illness identity. Up close, nobody is normal: a deficit-focused discourse will always elicit confirmatory evidence for an illness-saturated view of the person (Slade, 2010). An alternative approach is however, possible. People with psychiatric diagnoses have countless ways of “getting on with their lives” (Allott, Loganthan & Fulford, 2002), which have begun to be documented and formalized over the past two decades (mentalhealthrecovery.com). Twenty-first century orientation sees us moving away from pathological, disease mentalities, towards a more positive, recovery-focused approach. Self-management is not another treatment, but a means of people becoming more active in their own recovery, taking up more responsibility for their experience and regaining more authority and control over their lives (Hill, Roberts et al., 2010). The Wellness Recovery Action Plan (WRAP) is one such self management approach, which offers a simple, sensible and structured approach, towards such self accomplishment.

The goal of this study was to evaluate the effects of involvement in a WRAP intervention programme at the National Learning Network, Ireland. Participants comprised a mix of
individuals with mental health and acquired brain injury (ABI) diagnoses, as well as their respective control counterparts. Results indicated that those who participated in the WRAP intervention, experienced statistically significant decreases in both Depression and Anxiety, compared to their wait-list counterparts. This was the case for both mental health and ABI participants, with the difference between pre and post conditions, even more pronounced for the mental health intervention and control group participants. In addition, participants reported having greater confidence, less fear in seeking support or asking questions of professionals, greater acceptance of their limitations, and an increased sense of hope. This apparent positive impact of WRAP, delivered in the context of mutual support groups, thus indicates that it should indeed be given serious consideration as a unique and worthwhile option, for improving mental health.

Knowledge of recovery and WRAP, also indicated significant post-WRAP outcomes for ABI and mental health participants of this study, as compared with their wait-list counterparts. This appeared to have a very empowering and inspirational effect on participants ranging from, increased awareness relating to the concept and ideas of recovery and wellbeing, enhanced self-awareness, application of daily self-management tools, and knowledge of triggers as well as areas of vulnerability. This finding supported Cook et al’s (2009) initial outcomes study, which similarly reported improvements in overall recovery post WRAP and a significant decrease in global symptom severity. Starnino et al., (2010) similarly reported a positive trend in symptom improvement, which approached significance in their illness outcomes study. However, their study did not include a control group, as is the case with many of the published WRAP research studies (e.g. Buffington, 2003; Higgins et al., 2011). Thus, while it appears evident that WRAP groups may indeed make a valued and significant contribution to improving the mental health and well-being of participants, further empirical research is necessary to corroborate and provide kudos to such initial claims.

Similarly, the need for ongoing, competent risk assessment and management, is paramount within recovery-oriented services. This will inform cases where individuals are deemed to pose a threat either to themselves or others, resulting in the issue of informed consent
being temporarily suspended. Davidson et al., (2006) purport that such cases do not contradict recovery, but pose important challenges to it – challenges which may in the future be addressed through such mechanisms as psychiatric advance directives or other creative means to enable people to retain control over their lives. In the interim, the authors suggest, rather than arguing about whether or not recovery-oriented care increases risk (an issue about which we have as yet, no data), it is more useful to highlight the ways in which a recovery-oriented approach clarifies and reinforces the need that already exists for appropriate risk assessments and management (Davidson et al., 2006).

In addition, future empirical research is necessary, to replicate further control trials as well as inclusion of follow-up measures. The applicability of WRAP with other participant populations (such as ABI) may also be considered in light of populant characteristics, giving rise to appropriate and necessary adaptations. Such replication studies will inform the future practice of WRAP, as well as adding to the existing body of empirical research. Correspondingly, this will inform additional and/or superior methods of data analyses, as well as enhancing overall WRAP research findings and applicability. This in turn will offer enhanced kudos and credibility to this relatively new, recovery oriented approach.

Conclusion:

The present study offers a timely and significant contribution to the world of recovery and WRAP research. Notwithstanding the previously outlined research limitations, the results offer preliminary indicative evidence that WRAP, a consumer-led self management programme, can play an important ancillary role, in supplementing the current mental health care approaches of positive psychology and twenty-first century recovery. If health services are to give primacy to increasing well-being, as opposed to treating illness, then health workers need new approaches to working with individuals. For mental health professionals, this will involve the incorporation of emerging knowledge, from recovery and positive psychology, into education and training for all involved in service provision. Systemic transformation nevertheless takes time, and the process of embracing an holistic
and all-encompassing recovery approach, involves among other things, an element of risk. By continuing to offer and systematically evaluate programs such as WRAP, which implement elements of choice, self-determination and a focus on life goals and aspirations, this will inform future practice on recovery led outcomes, as well as effective risk management strategies. Thus, future empirical studies of this nature, will assist in building a solid and credible foundation, towards the future practice of WRAP and other recovery-led outcomes for improving mental health. Similarly, within the context of a recovery-oriented health care system, the ongoing conduct of risk management and risk assessment, will help to identify circumstances and situations in which people should not or cannot be permitted to act in ways which would place themselves or others at risk. In so doing, the future of recovery healthcare practice, as well as funding and training provisions, will be positively impacted. In conclusion, the more that programs implement elements of choice and self-determination, and a focus on life goals and aspirations, and the more data are collected to demonstrate such effectiveness, the better our chances of advocating successfully for more adequate funding of care as well as appropriate service provision (Davidson et al., 2006).
References


Mulvey, E.P (1994) : Assessing the evidence of a link between mental illness and violence. Hospital and Community Psychiatry, 45, 663-668


Scottish Executive. Delivering for Mental Health Edinburgh; Scottish Executive, 2006.


[www.govinfo.library.unt.edu](http://www.govinfo.library.unt.edu)

[www.imhrec.ie](http://www.imhrec.ie)

[www.mentalhealthrecovery.com](http://www.mentalhealthrecovery.com)

[www.springer.com](http://www.springer.com)

[www.ncd.gov](http://www.ncd.gov)

[www.psychiatryonline.org](http://www.psychiatryonline.org)

[www.rcpsych.ac.uk](http://www.rcpsych.ac.uk)

SECTION D : Critical Review

How effective are mindfulness based therapies in the treatment of Binge Eating Disorder and Bulimia Nervosa?

Rationale and Context:

My decision to examine mindfulness based therapies as applied to Binge Eating Disorder (BED) and Bulimia (BN) grew quite organically, while completing the case study for this portfolio. Inspired by my client’s responsiveness to the practice of mindfulness based strategies, as a way of managing her Bulimic symptoms (in the face of several failed previous alternatives) I felt it was an area worthy of further exploration. Upon initial review of the literature, it seemed that while there were a handful of studies devoted singularly to the application of mindfulness based therapies to BN, because binge eating is central to BN and BED, treatment outcome research for BED has tended to parallel that of BN (Telch, Agras & Linehan, 2001). This informed my decision to include both areas for consideration in this review.

The present portfolio in its entirety, is concerned with Recovery and Self Management, within a twenty-first century context. Since the turn of the century, influences from the East have seemingly impacted the theory and practice of Western Psychology, and approaches such as mindfulness and meditation are gaining much deserved attention and recognition. I wish to examine the area of self directed therapy, specifically Mindfulness based approaches, as applied to Binge Eating Disorder (BED) and Bulimia Nervosa (BN).

Broadly speaking, my interest in Mindfulness and its relevance to Psychology began in 2009, when I attended an experiential workshop, dedicated to the potential application of
mindfulness to a variety of psychological ailments. Since then, I have become increasingly interested in examining the ideas and practices of Eastern Philosophy, and combining these, where appropriate, with the science and practice of Western Psychology. The particular attracting force for me in this modern-day merger, lies in the notion of taking personal responsibility and maintaining an attitude of non-judgement. Similar to Solution Focused Brief Therapy (as discussed in Section C), mindfulness focuses on strengths as opposed to limitations, a more empowering way forward, than some of the more traditional psychotherapeutic approaches (Malzfeldt, 2013). Mindfulness also bears semblance to Wellness Recovery Action Planning (WRAP), (as discussed in Section B) which is similarly underscored by a solution focused positive psychology approach.

**Proposed Structure :**

I propose to initially situate Mindfulness within the overall context of Eating Disorders (EDs). I will give a brief introduction to Binge Eating Disorder (BED) and Bulimia Nervosa (BN), as defined by the Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM5) (American Psychiatric Association, 2013). I will broadly outline previous, more traditional methods of treatment, and using literature study analysis, I will present twenty-first-century mindfulness as an area for consideration. I will attempt to answer the overall question of whether or not mindfulness based therapies are effective in treating BED and BN, by examining the purported theories as well as critiquing the relevant literature research studies.

**Brief Introduction :**

There is a growing body of research evidence that mindfulness, i.e. non-judgmental, present-moment awareness, and its related constructs are relevant to understanding the development and maintenance of eating disorders (Butryn, Jurasico, Shaw, et al., 2013). Successfully treating eating disorders remains an ongoing challenge for treatment providers, and Western Psychology has become increasingly interested in the original Buddhist
practice of mindfulness as a means to therapeutic change (Slyter, 2012). Since the introduction of mindfulness in Western clinical settings, a large number of studies have documented its beneficial effect on psychological distress and well-being. I propose to examine a selected number of studies, which pay particular attention to the effectiveness of mindfulness based therapies in treating Bulimia Nervosa (BN) and Binge Eating Disorder (BED).

**Mindfulness in Psychological Treatment:**

Within the therapeutic context, mindfulness is defined as “the awareness that emerges through paying attention on purpose, in the present moment and non-judgmentally, to the present moment, and non-judgmentally to the unfolding of experience, moment by moment” (Kabat-Zinn, 2003, p.145). Bishop, Lau, Sharpiro, et al., (2004) defined the Western version of mindfulness as non-elaborative, non-judgmental, present-centred awareness in which each thought, feeling or sensation that arises in the attentional field is acknowledged and accepted as it is. Mindfulness includes goals such as enhancing well-being and awareness of the self and environment, along with disciplining the emotions and the mind (Levine, 2000). In this sense, comparisons could be made with Cognitive Behaviour Therapy (CBT) which similarly considers the significance of ‘mind mastery’ with emphasis on self management, self control and self improvement. CBT and mindfulness based approaches also emphasise the importance of systematic training on oneself, to counter and ultimately uproot particular problems. Perhaps one key difference with respect to these two approaches, is the de-emphasis of mindfulness based approaches, on examining each distressing thought in great detail, instead favouring simple observation of such thoughts, without judgement.

Many psychological interventions that involve the integration of Eastern and Western philosophies started emerging in the 1970s. Kabat-Zinn played a seminal role with the growth and acceptance of mindfulness within clinical circles, when he created the Mindfulness-Based Stress Reduction (MBSR) program (Kabat-Zinn, 1982). MBSR is rooted in
authentic Buddhist traditions (Kabat-Zinn, 1990), and was originally developed for the management of chronic pain and stress-related disorders. Mindfulness Based Cognitive Therapy (MBCT), developed in the 1990s by Segal, Williams & Teasdale, is an off-shoot of MBSR and is designed to help prevent relapse in depression (Segal, Williams & Teasdale, 2002). Like MBSR, it is also considered to be beneficial for other conditions. MBCT developed within the field of CBT and is based upon the assumption that the way we perceive events largely determines the way we feel, and subsequently how we behave. MBCT is a strong example of Western Psychology’s interest in mindfulness as a means to therapeutic change (Gilpin, 2008). Mindfulness interventions focus on altering the impact of and response to, thoughts and feelings. Such strategies are regarded as particularly effective for conditions where intolerance of negative affect and subsequent behavioural avoidance, play a major role (Bishop, Lao, Sharpiro, et al., 2004). In addition, the role of mindfulness in disengaging from unhealthy behaviour patterns and helping to foster more adaptive strategies, is thought to be significant in developing effective coping strategies (Kabat-Zinn, Wheeler, Light, et al., 1998). Examples of conditions where mindfulness interventions have been used include chronic pain, stress, anxiety, depression, borderline personality disorders, panic attacks, and eating disorders (Baer, 2003).

**Bulimia Nervosa and Binge Eating Disorder Defined:**

The Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-5; American Psychiatric Association, 2013), defines Bulimia Nervosa as one of the primary eating disorders. Bulimia Nervosa (BN) is characterised by frequent binge-eating episodes, the use of compensatory behaviours to prevent weight gain, such as self-induced vomiting, misuse of laxatives, fasting, or excessive exercise; and self evaluation which is unduly influenced by body shape and weight. Bulimia Nervosa usually begins in late adolescence or early adult life (DSM-5) (American Psychiatric Association, 2013). Individuals with BN experience a lack of control over their eating during the episode, including the feeling that one cannot stop eating, control how much one is eating, or control the types of foods eaten. Prevalence estimates for BN vary from 1-1.5% for young women. Less is known about the point
prevalence of bulimia in men, but it is far less common in males than in females. (DSM-5; American Psychiatric Association, 2013).

Previously located in the DSM-IV-TR, as a category of eating disorders not otherwise specified (EDNOS) (DSM-IV-TR; American Psychiatric Association, 2000), Binge Eating Disorder (BED) now occupies status in the DSM-5 as one of the primary eating disorders (DSM-5; American Psychiatric Association, 2013). BED includes frequent binge eating, usually without the compensatory behaviours typical of BN. Some inappropriate purging behaviour may occur occasionally, but it is not regularly used to offset the effects of binge eating. Binge Eating typically begins in late adolescence or in the early 20s, often coming soon after significant weight loss from dieting (DSM-5; American Psychiatric Association, 2013). An episode of binge eating is characterised by eating, within a 2-hour period of time, an amount of food that is definitely larger than most people would eat during a similar period of time, in similar circumstances. BED afflicts approximately 5-10% of the general population (Grilo, 2001) with the gender ratio far less skewed in binge eating disorder than in bulimia nervosa. While individuals with anorexia nervosa are severely underweight, those with BED or BN tend to be of normal weight or obese (Kristeller et al., 2006).

All eating disorders are associated with significant distress and/or dysfunction, including mood disturbance, anxiety symptoms, substance abuse, and physical complications (Kristeller, Baer, Quillian-Wolever, 2006). Proux, (2008) noted that depression and anxiety are commonly associated with eating disorders, while previously referred to ‘sub-threshold cases’ (DSM-IV-TR; American Psychiatric Association, 2000) appear also to have significant levels of distress or impairment. Striegel-Moore, Dohm, Solomon, et al.,(2000) found that a community sample of women with sub-threshold BED, did not differ from those meeting the full criteria of having an eating disorder on measures of shape, weight concern, dietary restraint, or psychiatric distress. Those with BED often struggle with depression, anxiety and to a lesser extent, substance misuse disorders (DSM-5; American Psychiatric Association, 2013).
The evidence overall appears to suggest that a wide range of eating disturbances cause significant distress and dysfunction in the general population, with problems more common in women than in men. With persistent societal pressures to conform to a certain ‘thin’ aesthetic on one hand, coupled with a rising obesity epidemic on the other, the resulting dysfunctions in the western world are pervasive and profound. Given this less than optimistic backdrop, perhaps the mindful ways of the east are worthy of our consideration.

**Traditional Approaches to the Treatment of BN and BED:**

Cognitive Behaviour Therapy (CBT) is most often the treatment of choice for EDs and is primarily aimed at identifying and replacing maladaptive thoughts about the implications of weight and shape with more realistic cognitions (Fairburn, Cooper & Shafran, 2008). CBT is based on the theoretical model that chronic dieting in an effort to control weight, promotes and maintains binge eating. CBT therefore focuses on decreasing dietary restraint and establishing regular, healthy eating patterns in addition to combating maladaptive beliefs about eating and weight. The first goal in treatment, is to normalise eating, followed by focus on identifying and reframing maladaptive beliefs. Levine & Marcus, (2003) propose that CBT reduces binge eating and psychopathology, and increases self esteem in BED clients. For BN, the literature suggests that CBT eliminates binge eating and purging in about 50% of participants, and reduces it in many others, and that maladaptive dieting and distorted body image are also substantially improved (Wilson, 2007). CBT for BED also has strong empirical support (Apple & Agras, 1997; Fairburn, Marcus & Wilson, 1993), as does Interpersonal Therapy (IPT)(Klerman, Weissman, Rousanville & Chevron, 1984) for both BN and BED.

While CBT indeed appears to appeal to many individuals, there are similarly those who demonstrate incomplete or unsatisfactory responses to treatment. According to Telch, Agras & Linehan, (2001) as many as half of individuals seeking treatment for BED, do not benefit from CBT. Teasdale, (2000) argues that ruminative/analytical self-focus is only one way of processing self-material. An alternative model of binge eating, purports that binge eating serves to regulate affect (Heatherton & Baumeister, 1991). The basic premise of this model is that individuals who binge eat have difficulty regulating negative emotions and try
to cope with their emotional distress by binge eating. The binge eating temporarily relieves the aversive negative emotional states, thereby reinforcing binge eating (Telch, Agras & Linehan, 2001).

Mindfulness based approaches are aimed at disengaging from ruminative thought patterns and encourage engagement with an alternative ‘experiential’ mode of self-focus. This is characterised by directly ‘experiencing’ thoughts, body, and emotions, on a moment-to-moment basis as mental events, in contrast to judgemental or evaluative thinking that often elicits goal-directed behaviour (Williams, Teasdale, Segal & Kabat-Zinn, 2007). One such mindful approach includes, Dialectical behaviour therapy (DBT) (Linehan, 1993), which has been adapted for BED and BN. DBT targets emotional regulation by teaching adaptive skills, in order to enhance individuals’ emotion regulation capabilities. I will later discuss DBT as well as other mindfulness-based therapies hereafter.

**Third Generation Behavioural Therapies:**

Mindfulness is recognised as a relevant component of the various third generation behavioural therapies (Wanden-Berghe, Sanz-Valero et al., 2011), which include Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), Dialectical Behaviour Therapy (DBT; Linehan, 1993) and Mindfulness-based Cognitive Therapy (MBCT; Vallejo, 2006). Although the application of mindfulness based therapies to the treatment of EDs is growing, empirical evidence regarding its efficacy has not been established (Wanden-Berghe, Sanz-Valero & Wanden-Berghe, 2011). This review will examine the potential value of further evidence based research in this area, by objectively examining and evaluating existing relevant studies, in which mindfulness based therapies have been used in the treatment of Bulimia Nervosa (BN) and Binge Eating Disorder (BED). Firstly, I wish to examine some of the proposed mindfulness based theories behind such disordered eating patterns.
Theoretical Models and Empirical Evidence supporting Mindfulness Based Therapies:

Disordered eating behaviours may arise, when individuals have difficulty regulating their emotional experience (Baer, Fischer & Huss, 2005). Corstorphine, (2006) proposes that mindfulness is well suited to the eating disorder population because many sufferers experience difficulties with regulating emotional, cognitive and physical experiences. It has been demonstrated that individuals with eating problems frequently have difficulty tolerating negative affect and distress, and use food, whether in a restrictive or binge fashion, to regulate these internal experiences (Corstorphine, 2006). Individuals may therefore engage in experiential avoidance, defined as an unwillingness to experience negative thoughts, emotions, and physical sensations, labelling these internal states as unacceptable and intolerable (Hayes & Wilson, 1994). According to this conceptualisation, food restriction or overconsumption then becomes a short-term experiential avoidance technique (Linehan, 1993).

It has been proposed also that excessive dieting and chronic binge eating in attempt to avoid emotional experiences, often results in an inability to distinguish between hunger and satiety signals (Smith, Simmons, Annus & Hill, 2005). Disordered eating behaviours interfere with an individual’s capacity to recognise natural physiological cues related to hunger and fullness, and also reduces the ability to differentiate between such physiological signals and emotional distress (Pinaquay, Chabrol, Simon, et al., 2003). Furthermore, social conditioning to overeat or deny oneself food, reinforces physiological dysregulation and maintains disordered eating behaviour (Lowe & Levine, 2005).

The dysregulation model proposes that the chronic dieting in which many binge eaters engage, makes them susceptible to binge triggers that include physical stimuli, distorted cognitions and negative affect. While it is informed by the affect regulation model, it gives more attention to introducing skills and awareness-related processes to food intake per se. Chronic dieting, patterns of binge eating, and use of food for non-nutritive reasons (i.e. emotional eating) are not only symptoms of underlying dysfunction, but actively contribute
to it. Emotionally, dieting may lead to frustration and deprivation, and dysphoria due to negative self-awareness. Once a dietary rule is violated (such as eating a “forbidden” food or eating at an inappropriate time), the individual may surrender control altogether, perceiving that they have “blown it” and binge, in a pattern consistent with the abstinence violation effect (AVE; Marlatt & Gordon, 1985). This is further compounded by a lack of physiological awareness of satiety (Hetherington & Rolls, 1996) that also leaves one vulnerable to binge eating, in that normal cues to stop eating are ignored or not experienced. The binge may bring some immediate physical and emotional gratification, but it is likely to be quickly followed by physical discomfort and guilt. This then leads to continued negative self-evaluation and a reinstatement of dietary constraint. The binge cycle may vary by person, and some may not experience all of these components.

Mindfulness interventions aim to improve emotional regulation and enhance awareness of hunger and satiety cues by increasing awareness of internal states and reframing them as transient events (Kristeller & Hallett, 1999). Mindfulness encourages individuals to avoid responding to situations or stimuli in an automatic, impulsive way in order to alleviate negative affect (Kristeller, Baer & Quillian-Wolever, 2006). Furthermore, mindful eating techniques increase awareness of physical hunger and fullness signals, allowing individuals to respond appropriately to hunger and satiety cues, rather than binge eating or restricting food intake. For example, mindful breathing and body scanning techniques increase recognition of physiological hunger cues (Hepworth, 2011). Mindful eating also involves augmenting recognition of reactions and judgments about certain foods, e.g. anxiety when eating chocolate, and helps elicit a greater understanding of food preferences and aversions (Baer et al, 2005).

**Mindfulness-Based Eating Disorder (M-BED) Treatment:**

Mindfulness based group interventions have been demonstrated to have a positive impact on reduction of binge eating frequency and increased sense of control over food (Kristeller
et al., 2006). An exploration of a mindful meditation based intervention over six weeks in the treatment of binge eating disorder with 18 obese women, found that ratings of control over eating and awareness of hunger and satiety signals improved significantly post-intervention (Kristeller & Hallett, 1999). The frequency and proportion of bingeing was also significantly reduced as intended. Similarly, an 8-week mindfulness-based stress reduction group, found a small to moderate decrease in binge eating behaviours (Smith et al., 2006). Reductions in binge eating were attributed to improvements in self acceptance and reduced anxiety symptoms.

Baer and colleagues (2005) applied mindfulness based cognitive therapy to 10 women with binge eating behaviours, and found a considerable reduction in binge eating and food concerns, particularly the belief that eating results in loss of control of food intake. Other mindfulness interventions for binge eating disorder have demonstrated that improved awareness of satiety signals, but not hunger cues, was significantly correlated to a reduction in binge eating (Kristeller & Wolever, 2011).

In a qualitative study by Kathryn Proux (2008), the experience of six college-age women with Bulimia Nervosa (BN) was examined, after they participated in an eight week mindfulness-based eating disorder treatment group. The phenomenological study used individual interview transcripts, journals, and pre and post treatment self-portraits to analyse results. The researcher’s experience was organised into five main themes: (1) sense of self before the group (2) coping strategies before the group (3) connection with one another in the Mindfulness Based Eating Disorder (M-BED) group (4) connection with themselves through meditation and (5) shifts in relationship to self and others resulting in new coping strategies at the conclusion of the M-BED group. Participants described their experience of transformation, from emotional and behavioural extremes, disembodiment and self-loathing, to the cultivation of an inner connection with themselves. The combination of meditation practice, psychoeducation and interpersonal approaches, resulted in greater self-awareness, acceptance and self-compassion. Intense, emotional reactivity was reduced while judgmental thoughts, self-harming behaviours and improved abilities to manage stress were also observed. One possible criticism of this study, is that participants were
concurrently receiving individual psychotherapy, so it is difficult to clearly define the singular treatment effects of the M-BED group. Further research and analysis is therefore needed to establish relative treatment effects of each, as well as comparative concurrent treatment effects. Furthermore, the degree of benefit, particularly for those individuals not responding to more traditional treatment effects is worthy of further exploration.

**Acceptance and Commitment Therapy (ACT):**

As previously stated, mindfulness is recognised as a relevant component of the various third generation behavioural therapies (Wanden-Berghe, Sanz-Valero & Wanden-Berghe, 2011), including Acceptance and Commitment Therapy (ACT; Hayes et al, 1999), Dialectical Behaviour Therapy (DBT; Linehan, 1993) and Mindfulness-based Cognitive Therapy (MBCT; Vallejo, 2006).

Tapper, Shaw, Ilsley, et al, (2009) based their weight-loss intervention on ACT. Women randomised to the intervention attended four two-hour workshops designed to teach (a) cognitive diffusion, defined as the ability to see thoughts as just thoughts rather than ideas that need to be believed and acted upon; (b) acceptance of difficult feelings and sensations; (c) nonjudgmental attitudes; and (d) commitment to personal values. At six-month follow-up, the participants who reported greater use of the workshop principles, reported more increases in physical activity, and greater reductions in (BMI) than their control counterparts. Reductions in binge eating mediated the reductions in BMI.

Lillis & colleagues, (2009) also supplemented their weight loss program with a one-day mindfulness workshop, based on the principles from Acceptance and Commitment Therapy (ACT; Hayes, Strosahl & Wilson, 1999). The workshop targeted obesity-related stigma and psychological distress. At three-month follow-up, participants showed more improvement in obesity-related stigma, psychological distress, and body mass, than those randomised to the wait-list control group (Lilis, Hayes, Bunting et al., 2009).
Dialectical Behaviour Therapy (DBT):

The recent adaptation of DBT for eating disorders consists of 20 weekly sessions, and has been applied in both group and individual formats (Telch, Agras & Linehan, 2000; Safer, Telch & Agras, 2001). Dialectical behaviour therapy is an empirically supported treatment, which was developed initially to treat adult female multi-problem outpatients, diagnosed with Borderline Personality Disorder (DBT; Linehan, 1993). In recent years DBT has been adapted for application to BN and BED (Safer et al., 2001; Telch, Agras & Linehan, 2001). DBT for Eating Disorders is based on the emotion regulation model (Wiser & Telch, 1999), which purports that binge eating functions to reduce aversive emotional states. Negative emotions may be triggered in a variety of ways, such as through comparison of one’s body with images found in fashion magazines, by unpleasant interactions with others, or by other undesirable circumstances (Kristeller et al., 2006). Once negative emotion has been triggered, the individual fears that it will escalate, and searches for a means of reducing it. By distracting attention from the negative affect, binge eating temporarily relieves the distress, and thus is negatively reinforced.

The mindfulness skills of DBT are taught, in order to counteract the tendency to use binge eating to avoid awareness of negative emotional states. Such skills include emotion regulation, distress tolerance, mindfulness meditation and behavioural chain analysis skills, which are applied to binge eating episodes. These skills encourage non-judgmental and sustained awareness of emotional states as they are occurring, without reacting to them behaviourally. DBT for BN and BED consists of 20 weekly sessions, whereby participants learn to observe their emotions without efforts to escape them and without self-criticism for having these experiences. This state of mindful awareness, facilitates adaptive choices about emotion regulation and distress tolerance skills that could be used in place of binge eating (Baer et al., 2006). Several clinical trials have provided strong support for this adaptation of DBT (Telch et al., 2000; Telch et al., 2001; Safer et al., 2001).
Telch et al., (2000) proposed a trial, involving 11 women diagnosed with BED. The women participated in the group form of DBT, with 20 weekly 2-hour sessions. The Eating Disorder Examination, together with measures of weight, mood, and affect regulation at baseline and post-treatment were administered. Results showed that 9 of the 11 women had completely stopped binge eating by the end of treatment and no longer met the criteria for BED. Substantial reductions in the urge to eat when feeling negative affect were observed, as were increases in self-reported ability to regulate negative moods. These findings suggest that the treatment was successful in teaching affect regulation skills, and that participants’ ability to use these skills when experiencing negative affect improved. At 6 month follow-up, 7 of the women remained abstinent from binge eating, and those who had binged did not meet the frequency criteria for BED diagnosis. One criticism of this study however, is that it did not incorporate a control group for treatment comparisons.

Telch et al., (2001) followed this paper with a randomised trial in which DBT for BED was compared to a wait-list control condition. The treatment intervention was based on the hypothesis that binge eating serves to regulate affect, with new skills taught which were aimed at enhancing adaptive affect regulation, thus reducing the need to binge eat. 44 women with BED were randomly assigned to group DBT or to a wait-list control group. Participants were administered the Eating Disorder Examination, in addition to measures of weight, mood and affect regulation at baseline and post-treatment. Women in receipt of DBT evidenced significant improvement on measures of binge eating and eating pathology compared with controls. 89% of the treatment group had stopped binge eating for at least 4 weeks, prior to the end of treatment, compared with just 12.5% of the group receiving no treatment. At 6 month follow up, 56% of the DBT participants were abstinent from binge eating. Findings did not support the hypothesis that increased ability to regulate affect was responsible for the observed improvements, as no differences between groups in negative affect or mood regulation were noted. However, it is possible that the treatment reduced the urge to eat, when experiencing negative affect, rather than reducing the affect itself or increasing confidence in one’s ability to regulate same. These preliminary results support further enquiry into DBT as a treatment for BED.
Safer, Telch & Agras (2001) reported an additional randomised control study to support a role for Dialectical Behaviour Therapy (DBT) in emotion regulation treatment for individuals with Bulimia Nervosa (BN). Thirty-one women (aged between 18 and 65 years) with at least one binge/purge episode per week over the previous 3 months, were recruited through newspaper advertisements and clinic referrals. Enrolled participants were randomly assigned to the treatment condition or the wait-list condition, in blocks of eight, and pre and post measures were administered. Treatment involved 20 sessions of weekly 50-minute individual psychotherapy, specifically aimed at teaching emotional regulation skills, to reduce rates of binge eating and purging. The participants who were assigned to the wait-list condition, were offered DBT after they completed the assessments, at the end of the 20-week wait-list condition. Results showed that participants’ rates of binge eating and purging significantly decreased post treatment. At 20 weeks, 28.6% of participants in the DBT group were abstinent from binge eating and purging behaviours, compared with no participants in the wait-list group. 35.7% DBT treatment participants had mild symptoms, reducing their number of objective binge eating episodes by 88% and of purging episodes by 89%. Five DBT participants (33.7%) remained symptomatic and met DSM criteria for BN, while two wait-list participants had mild symptoms and no reduction in the number of binge or purge episodes. Of note is the 80% of the wait list who continued to be symptomatic. There were no dropouts from the treatment group. Substantial decreases in the tendency to eat when feeling negative were also observed.

Without comparisons that involve other conditions besides the wait-list condition, it is difficult to confidently conclude that DBT specifically had any significant effects on bulimic symptoms (beyond the non-specific effects of psychotherapy). Nevertheless, the findings are suggestive of overall improvement in binge eating and purging behavior, via DBT.

**Mindfulness-Based Cognitive Therapy:**

An adaptation of Mindfulness-based Cognitive Therapy (MBCT) for BED has been explored by Baer, Fischer & Huss, (2005). Although MBCT was developed to prevent depressive
relapse, most MBCT strategies are not specific to depression, and adapt quite easily to the
treatment of BED (Segal et al., 2002). Baer et al., (2005) note that several recent theoretical
formulations of binge eating imply that mindfulness skills might be useful in treating this
problem. For example, Heatherton & Baumeister, (1991) purport that binge eating is
motivated by a desire to escape from self-awareness. Setting high personal standards leads
to negative thoughts and unpleasant emotions when these standards are not met. This
aversive internal state leads to a narrowing of attention and reduces inhibitions against
eating. A model of emotional schemas proposed by Leahy, (2002) suggests that individuals
who label their emotions as pathological, may attempt to reduce awareness of their
emotional states through substance use, dissociation, or binge eating. In addition, Lowe,
(1993) notes that individuals who binge eat often have extensive histories of unsuccessful
dieting and weight cycling, which may lead to impaired sensitivity to hunger and satiety
cues.

MBCT includes a variety of mindfulness practices designed to cultivate nonjudgmental and
nonreactive observation and acceptance of bodily sensations, perceptions, cognitions and
emotions. Participation in MBCT aims to encourage enhanced ability to observe hunger and
satiety cues, increased willingness to experience negative affect that previously triggered
binge eating, decrease believability of negative thoughts common to binge eating
individuals, and increase ability to choose adaptive behaviours in stressful situations
(Kristeller et al., 2006).

Empirical support for MBCT applied to BED is preliminary but encouraging. Baer et al., (in
press) reported a complete cessation of eating binges and large reductions in eating, shape
and weight concerns, as well as increases in mindfulness. In a subsequent uncontrolled pilot
study with six participants, Baer et al., (2005) reported large reductions in binge eating,
eating concerns and the expectancy that eating leads to feeling out of control. Increases in
mindfulness were also noted. It should be noted that this study was without a control
group, thus treatment effects, although optimistic, should be interpreted with caution.
Mindfulness-based eating awareness training (MB-EAT):

Mindfulness-based eating awareness training (MB-EAT; Kristeller & Hallett, 1999) was developed by integrating elements from Mindfulness Based Stress Reduction (MBSR)(Kabat-Zinn, 1982; 1990) and CBT with guided eating meditations. The program draws on traditional mindfulness meditation techniques as well as guided meditation, to address specific issues pertaining to shape, weight and eating-related self-regulatory processes, such as appetite. The meditative process is integrated into daily activity, related to food craving and eating. It is informed by current knowledge of processes in relation to food intake regulation, including the role of hunger and satiety cues. Primary attention is given to underlying eating patterns, including overeating, and binge patterns. Patterns of overeating, particularly bingeing, can be viewed as symptomatic of a prototypical dysregulation syndrome, involving disturbances of affect regulation, cognitive and behavioural dysregulation, and physiological dysregulation (Kristeller, 2003). Mindfulness meditation is conceptualised as a way of training individuals’ attention, to assist first with increasing awareness of automatic patterns and then disengaging from undesirable reactivity. It is also viewed as a way to heighten awareness of potentially more healthy aspects of functioning, in this case physiologically-based hunger and satiety cues, and to use such awareness to more “wisely” inform behaviour and experience.

Each session of MB-EAT incorporates meditation practice, while mini-meditations are also taught whereby participants learn to stop for a few moments at key times, to practice non-judgmental awareness of thoughts and feelings. Several eating-related guided meditations are included, in which participants focus nonjudgmental attention on thoughts, sensations and emotions related to hunger, satiety and binge triggers. A number of eating-related meditations use food, culminating with making food choices mindfully, first between two foods and then at a buffet. Several sessions also incorporate mindful body work, moving from a body scan, to self-soothing touch, to mindful walking. The intervention then transitions to a forgiveness meditation related to one’s own body and self, and a wisdom meditation, to emphasise that the wisdom to make better choices lies within.
Interventions that incorporate mindfulness meditation, with a goal of increasing general psychological and physiological self-regulation, are particularly well-suited to the complexity of behavioural, emotional and cognitive dysregulation observed in eating disorders (Kristeller et al., 2006). While CBT incorporates some aspects of the MBEAT model, e.g. the distorted thinking of the abstinence violation effect (AVE) and the use of behavioural substitutions for emotional eating, the MBEAT program may perhaps better attenuate or interrupt more aspects of the eating disorder cycle. By comparison to the previously outlined DBT approach, MBEAT appears more focused on the regulation of experience of eating. Perhaps, MBEAT, in combination with DBT or CBT might be worthy of further exploration in considering the combined efficacy of each, as well as examining individualized between group effects.

Evidence Base for MB-EAT:

The original proof of concept study used a non-randomised, extended baseline/follow-up design (Kristeller & Hallett, 1999) with a completed sample of 18 obese women out of an initial 20 participants. Their average age was 46.5 and mean weight was 238lbs (BMI : 40). None had previous experience with meditation, and all met DSM-IV criteria for BED with obesity. They participated in a manualised seven-session group treatment program lasting over six weeks, with three weeks of weekly assessment prior to, and following treatment. Binges per week dropped from slightly over 4 to 1.5, with only 4 participants still meeting criteria for BED at follow-up; binges that remained decreased substantially in magnitude. Scores on the Binge Eating Scale (Gormally, Black, Daston & Rardin, 1982) fell from the “severe” range to a level just higher than having “little or no problem” with binge eating. Measures of depression and anxiety also decreased from clinical to sub-clinical levels. The strongest predictor of improvement in eating control was the amount of time participants reported engaging in eating related meditation, rather than general meditation. Improvement in awareness of satiety cues was significantly correlated with a reduction in the number of binges reported, but changes in awareness of hunger cues was not. There were no significant weight changes related to treatments.
While the results of the above could not be attributed unequivocally to the meditation effects, the pattern observed nonetheless suggests that engagement in the meditation practice, contributed to changes in mood and behaviour. The magnitude of change was also consistent with those from treatments drawing on more traditional methods, including CBT (Agras, Telch, Arno, et al., 1995), suggesting that they did not simply reflect non-specific effects. Furthermore, results suggest that mindfulness and increased awareness of satiety cues may be particularly important as mediating variables. While awareness of hunger cues also improved, BED is inherently more a dysfunction of failure to terminate eating, than one of initiating eating too frequently (though both may occur). Therefore, becoming more sensitive to satiety signals may be particularly useful for increasing control with binge eating (Kristeller et al., 2006).

Kristeller et al., (2005) further completed a randomised control trial, which included a larger sample size of 85, with similar characteristics to the above earlier study. It included 15% men, who were randomised to the MB-EAT condition, a psycho-educational (PE) treatment, or a wait-list control condition, with follow-up at 1 an 4 months. The MB-EAT treatment components were somewhat revised and expanded to 9 sessions. In particular, mindfulness of satiety experience was separated into two sessions: taste awareness (sensory specific satiety) and fullness awareness. A session was also added that included a wisdom meditation. As before, the focus was on decreasing bingeing, rather than emphasis on weight loss. The MB-EAT and PE groups showed somewhat comparable improvements in behaviour and on the Binge Eating Scale. However, the MB-EAT group improved significantly on the ‘Disinhibition and Hunger Drive’ scales of the Stunkard & Messick, (1985) Eating Inventory, indicative of greater internalisation of change. As with the earlier study, while there was no overall average weight loss, improvement on these scales was highly correlated with weight loss. Measures of practice suggested that it was the use of eating-related “mini-meditations” that predicted greater improvement on other indicators of improved self-regulation.
A recently completed trial (Kristeller, 2010) broadened recruitment to include those with a BMI of at least 35. 25% met the criteria for clinical or sub-clinical (one binge/week) BED. The treatment expanded to 10 sessions with two follow-up sessions, and included additional components addressing “outer wisdom” specific to calorie and nutritional guidelines. These components explored how to use such guidelines in a personally sustainable way to encourage individuals to move towards weight loss, in addition to rebalancing eating patterns. Inner wisdom themes of hunger, satiety and choice awareness remained the same, with exercises to encourage re-regulation of eating behaviours without a sense of struggle or self-recrimination. Preliminary analysis indicated that participants with BED showed comparable improvement to those without BED, including a weight loss of approx. 7 lbs.

**Compassion focused therapy:**

It is difficult to speak of the ‘new generation of therapies’ in the treatment of disordered eating, without introducing Compassion-focused Therapy (CFT). CFT is an integrated and multimodal approach that draws from evolutionary, social developmental and Buddhist Psychology, and neuroscience (Gilbert, 2009). CFT originally developed as a treatment to target shame, self-criticism, and self-directed hostility (Goss, 2014). It was designed to enhance the effectiveness of existing treatment approaches, by adding interventions to stimulate and cultivate affiliative processing. CFT includes interventions used in other therapies to help individuals manage eating (e.g. meal planning), address changes in weight (such as regular therapeutic weighing), behavioural experiments and exposure, and cognitive restructuring. Over time this developed into a more comprehensive treatment approach with a specific treatment protocol and theoretical model, that places compassion cultivation, at the heart of the treatment programme. CFT-E proposes that, at least in part, the treatment efficacy of existing therapies for eating disorders is being limited by the patient’s inability to use the affiliative soothing system. If skills (such as meal planning) cognitive restructuring or behavioural experiments are not embedded in the affiliative soothing system, at best these are experienced as unhelpful, and at worst can be
experienced as threatening. CFT’s suggested inclusion of an ‘affiliative soothing system’ would therefore appear to highly resonate with the compassion led approach offered by all mindfulness based therapies.

**Keeping weight off!**

The Enhancing Mindfulness for the Prevention of Weight Regain (EMPOWER) program is a mindfulness-based approach, designed to help participants keep weight off (Fikkan, Hawkins, Baime & Saunders, 2010; Wolever, Ladden, Davis, Best, et al., 2007; Wolever & Best, 2009). Similar to Solution Focused Brief Therapy (as in case study) the EMPOWER intervention, is 12 weeks in duration and assists people with goal setting and action planning. This is supported through weekly group mindfulness-based psychoeducational sessions, and bi-weekly individualised telephonic coaching. Aspects of Mindfulness Based Stress Reduction (MBSR) (Kabat-Zinn, 1982; 1990) are taught during the first four weeks as a way of building a meditation practice and cultivating non-judgmental awareness. Mindfulness principles to a specific topic, such as nutrition, physical activity, stress management, personal values and goal setting are also applied in each of the group sessions. The sessions are designed to progressively expand participants’ ability to apply mindfulness in increasingly challenging situations which might otherwise undermine healthy eating and physical activity. Mindfulness is presented as a way for participants to learn about themselves, by paying attention to their experience with a nonjudgmental spirit of curiosity. In so doing, participants of the EMPOWER program are encouraged to embrace and embody self acceptance. Similar to Wellness Recovery Action Planning (WRAP) (as per Appendix 5), the idea and expressed intention of this program, is that each individual is the expert on his/her life, thus enabling a reassuring and encouraging context in order to facilitate self belief and recovery.
Practical and conceptual issues of using mindfulness-based interventions with individuals presenting with BED and BN:

As with any other psychological approach, there are challenges to be considered with the application of mindfulness based therapies. When dealing with individuals presenting with BED and BN, there may typically be a history of “quick-fix” attempts to gaining control over eating behaviour. This mentality may pose difficulty in setting the framework for a more permanent, enduring approach that involves an alternative to dieting. Initially, most individuals who have difficulty with binge eating are so distrustful of their own judgment in regard to food, that they may be convinced that such a goal is impossible (Fletcher, 2012).

As in many applications of mindfulness and related meditation techniques, there is some value in framing it within a relaxation or stress management context. This is salient in relation to eating problems because stress and negative emotions are common triggers for compulsive overeating (Kristeller & Wolever, 2011). However, eating problems particularly lend themselves to the concept of cultivating a “wise” mind, to the idea of “going off” automatic and to the value of cultivating awareness of internal cues (Kristeller et al, 2006). Dieting, and at the other extreme, bingeing, entail disengagement from internal cues of hunger and satiety. Regimented calorie counting and strict portion control on the one hand, and unconscious over-consumption on the other, may therefore provide an appealing foreground for becoming more attuned or mindful of such experiences. Also, the idea of becoming more mindful of the enjoyment and satisfaction gained from eating quality food with conscious awareness, as distinct from unconscious eating of large, indiscriminate quantities, may also prove alluring. This is introduced by way of mindful eating exercises, whether simple ones like eating a raisin mindfully, or more challenging ones where potential binge foods and entire meals are eaten mindfully. This assists the individual in realising that they have absolute choice and control over each and every bite they put in their mouths. Mindfulness practice therefore helps cultivate awareness of emotional triggers and eating patterns, as a way to interrupt the chain of reactivity, and a way to contribute to emotional wellbeing. A chain reaction exercise, adapted from Dialectical Behaviour Therapy for eating disorders (Wisniewski & Kelly, 2003) helps capture the complexity of over-conditioned
responses, accompanied by the message that the links in the chain can be uncoupled, even in the midst of a binge.

Another issue which may arise, lies in presenting meditation practice in a way that is non-threatening, without raising concerns about religious identity. Some Christian religious teachings view meditation as inappropriate because it is associated with Buddhism or Hinduism. This may be alleviated by explaining that virtually all known religions, including Christianity, have meditative traditions, because it is a way to quiet the mind and access inner wisdom. These issues could be raised in the first meeting of the group, so as to avoid any potential fear or misunderstanding of individuals, which may prevent their uptake in participating in the group.

Motivating people to practice meditation is often a challenge (Kristeller, Baer & Wolever, 2006). Although practically everyone will acknowledge that engaging in meditation feels relaxing, practicing daily may feel like an effort or a chore. Meditation may be presented in a number of supportive ways to encourage practice, such as; a way to give oneself a “break” or “time-out” from life’s activities and demands, as a time to practice mindfulness so that it is easier to practice under more stressful circumstances. Acknowledging “racing thoughts” as normal and to be expected is also particularly helpful, as is acknowledging the challenge of being disciplined enough to sit in silence, doing nothing. The link between harsh self-judgment, over-eating and negative affect is all too familiar in people with disordered eating, as are common types of distorted thinking which merely serve to further the cycle of destruction and negative mood (Kristeller & Wolever, 2011). Cultivation of meditation practice is therefore extremely important, and may be aided (at least initially) by CDs, which provide support and structure. Ability to experience a sitting or standing meditation, with full conscious awareness of oneself, and one’s choice, without the aid of a CD, is obviously the ultimate goal.
Appropriate or recommended training and qualifications for therapists is an issue in providing mindfulness-based interventions (Kristeller, 2003). Traditionally, meditation has been taught as part of a complex heritage of practice, and despite the apparent simplicity of meditation practice in some respects, it is generally strongly advised that therapists using these approaches with individuals with eating disorders, have the appropriate background. This entails not only the appreciation for the underlying behavioural and psychological processes, but a personal practice in mindfulness meditation. Such personal practice and training in the MBSR or DBT certification programs is also desirable. At the same time, to the extent that the structure of the interventions and materials are available in manuals and the guided or focused meditations are available on CDs, relatively less training may be required.

Concluding Comments:

In conclusion of this review, and as a strong proponent of the mind-body connection in human functioning, I am drawn to reflect on the seemingly profound parallel between physical fitness and mental fitness, most especially on the training principle of ‘specificity’. When we engage in specific physical training, this has corresponding specific physical effects. Resulting physical benefits include strengthened muscle tissue, enhanced cardiovascular system, improved bone density, decreased risk of weight and heart related disease, not to mention promotion of recovery from specific physical injuries. In a similar vein, specific mental exercises may correspondingly allow the brain to become more fit and better protected against certain types of challenges (Stanley & Jha, 2009). Mindfulness exercises may be one avenue in consideration of such mental strengthening and enhancing.

When an individual leaves the present moment and engages in mental reflection, she/he enters the narrative focus. This is a place where memories are pondered and plans are made. While the narrative focus is essential to being human, it is also the mental space where psychological symptoms are exacerbated and disorders strengthened. In contrast to the narrative focus is the brain pathway activated by presence of mind exercises, which is
called experiential focus (Farb et al., 2007). Mindfulness meditation which occupies this experiential, here-and-now focus, offers a shifting of negative ruminating processes that feed psychological disorders. While CBT opts to examine self-recriminating thoughts, as a means to changing subsequent destructive behaviour patterns, according to Telch, Agras & Linehan (2001) as many as half of individuals seeking treatment for BED, do not benefit from CBT. Teasdale et al., (2000) propose that ruminative/analytical self-focus is only one of two distinct ways of processing self-material, and that changing the way individuals relate to their cognitions can influence how they feel. In essence, mindfulness exercises can function as a reset button in the brain, releasing individuals from a negative feedback loop.

The theories on which Mindfulness interventions are based have already been proposed, one of which is the theory that disordered eating is grounded in disconnection from appetite and other physical needs. When somatic and mental events go unrecognised, they sometimes trigger automatic behaviours like eating (Kristeller & Wolever, 2011; Wolever & Best, 2009). At their most basic and fundamental level, mindfulness-based approaches provide individuals with a heightened ability, to simply observe feelings, behaviours and experiences. They allow for more conscious and considered choice making, as distinct from impulsive, automatic and dysfunctional reactivity, often associated with eating and food-related difficulties. Individuals are thus enabled to bring experiences into full awareness, so that many types of distress, which would ordinarily have provoked an automatic response, can be tolerated. Thus, distress tolerance is increased and reactivity is automatically reduced. Because reduced reactivity enhances tolerance, the cultivation of mindfulness becomes self-reinforcing ((Caldwell, Balme & Wolever, 2012). Mindfulness cultivates self-acceptance and compassion, qualities that may disrupt the cycle of distress over-eating, negative emotions, and harsh self-recrimination that is common in compulsive and binge-eating behaviours (Gongora, Derksen & van Der Staak, 2004). In becoming more consciously aware, individuals are thus empowered to work with and develop wiser, more balanced relationships with their eating behaviour, food choices, their bodies and ultimately, themselves.
Addressing healthy eating and weight management are of increasing importance in counselling practice, with behavioural and environmental factors believed to be contributing to the rising obesity epidemic (Caldwell, Balme & Wolever, 2012). Making choices around food and eating is an ever-present, inescapable part of human, daily life. For some however, this is an arduous, all-consuming task, involving several complex emotions, which inform and alter decision making, often to one’s detriment and self-debasement. Based on the aforementioned studies, mindfulness-based interventions appear to hold promise in addressing such disordered eating patterns (Baer et al., 2006; Kristeller et al, 2006).

Areas for further study/consideration:

The above presented research findings, which examined the effectiveness of mindfulness in the treatment of BED and BN clearly hold promise. It should be noted however, that the majority of the research investigating the application of mindfulness to EDs, has explored the efficacy of these techniques as a stand-alone treatment (with the exception of Hepworth’s 2011 pilot study). Future research might consider examining the potential effects of mindfulness treatment as an adjunct to other treatment approaches, e.g. one which applies cognitive behavioural principles, in order to narrow treatment effects and compare efficacy.

As regards behaviour reduction, the DBT intervention offered in the earlier reported study (Safer, Telch & Agras, 2001), which examined reductions in both bingeing and purging, showed promising results. Few studies however, have investigated specific targeted behaviours, such as purging. Further research in this area might serve to ascertain whether or not a mindful eating group would positively impact on reducing the frequency and intensity of purging behaviour, as well as bingeing behaviour, in individuals with BN.
Without a control group, it is difficult to assess the exact ability of a mindfulness group to exclusively produce positive outcomes. While some of the earlier reported studies included a control group in their methodological design, some didn’t. Further research designs should consider the inclusion of such comparison groups to inform more concrete conclusions. Follow-ups similarly, although not always evident in previous studies, offer evidence of whether or not treatment effects are sustained over time.

Finally, the majority of past research that has explored the usefulness of mindfulness interventions in the treatment of eating disorders, has focused primarily on bulimia and binge eating disorder (Baer et al, 2005; Kristeller et al., 2005; Kristeller & Hallett, 1999; Proux, 2008). Mindfulness interventions might also be beneficial to individuals with anorexia nervosa (see Albers, 2011), provided they are not severely underweight. Other ‘Specified’ or ‘Unspecified’ Feeding and Eating Disorders (DSM-5, American Psychiatric Association, 2013) may similarly benefit, e.g. Purging Disorder, Atypical Anorexia Nervosa. Indeed, prior to the introduction of DSM-5, Grave & Calugi, (2007) suggested Eating Disorders Not Otherwise Specified (EDNOS) were the most common eating disorder diagnoses made in outpatient settings, while Fairburn & Bohn, (2005) alluded to the paucity of research in this area.

“The doctor of the future will give no medication, but will interest his patients in the care of the human frame, diet and in the cause and prevention of disease.” (Thomas A. Edison)
References:


BEAT Eating Disorders website (2008). Retrieved from

http://www.b-eat.co.uk/PressMediaInformation/Somestatistics


Wolever, R.Q. (2012). Mindfulness Based Approaches to Obesity and Weight Loss Maintenance. *Journal of Mental Health Counselling, 34*:3 269-282

APPENDIX 1
## Statistical Analysis Tables

### Table 1.1 ANALYSIS OF VARIANCE TABLE : HADS ANXIETY

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Table 1.6  ANALYSIS OF VARIANCE TABLE: MENTAL HEALTH RECOVERY MEASURE

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Table 1.7  ABI TREATMENT & CONTROL GROUPS  post hoc ‘t’ tests MHRM difference Scores

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Table 1.8  MENTAL HEALTH TREATMENT & CONTROL GROUPS  post hoc ‘t’ tests MHRM difference Scores

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APPENDIX 2
RE: Ethics application

From: Carla Willig
01/07/2011

To: Denise ODwyer
Cc: Farrant, Jacqui, Pires-Yfantouda, Renata

From: Willig, Carla
Sent: 01 July 2011 12:20
To: Denise ODwyer
Cc: Farrant, Jacqui, Pires-Yfantouda, Renata

Dear Denise

I hope you are well. I am writing to let you know that we have now had the opportunity to review your revised ethics application. I am pleased to be able to confirm that we are happy for you to go ahead with the research. Please retain this email as evidence of our decision. In order for us to be able to formally sign off the final version of the form, could you please integrate your responses to Renata’s queries (where appropriate, i.e. only where additional information is supplied, e.g. about how to deal with crises etc., rather than your explanations or clarifications regarding design decisions you have made) into your original submission and email this to me. Thank you!

Whilst your ethical application has now been passed, both Renata and myself would like to encourage you to consider the following points:

1) Should the aim of your research really be “to show that this intervention has a significant positive effect”? Surely, research should be designed to find out what is going on rather than to confirm the researcher’s expectations?

2) Your dual role as researcher and group therapist may compromise your results via social desirability effects.

Good luck with you research!

All the best, Carla

Professor Carla Willig
National Learning Network
Investing in People, changing Perspectives

Quest Brain Injury Services
9a Liosban Business Park
Tuam Road
Galway

11th May 2011

Dear Denise,

I am delighted to say that your research proposal in relation to WRAP has been approved by the Research Ethics Committee.

Yours sincerely,

[Name redacted]
Principal Clinical Psychologist
National Learning Network

National Learning Network
Redlynch Park, Beach Road, Sandyford, Dublin 16, Ireland
Tel: +353 1 205 7799; Fax: +353 1 205 7211
Email: info@nltn.ie; Website: www.nltn.ie

Inclusive Training, Inclusive Education, Employment Access

National Learning Network Limited
Registered Office: Redlynch Park, Sandyford, Dublin 16. Registered in Dublin, RE016467 27/09/05
APPENDIX 3

We would like to invite you to take part in a research study. Before you decide, it is important that you understand why the research is being undertaken, and what this involves for you. Please take the time to read this information sheet, ask questions and clarify any areas of concern.

Purpose of the study:
The purpose of this study is to examine the effectiveness of wellness recovery action planning (WRAP), as an efficient tool for managing one's mental health. Positive mental health is an area which needs to be given due attention, and WRAP offers the tools which help each and every person to do so.

Who is conducting the research?
Denise O'Dwyer is conducting the research, and will be co-delivering WRAP group training sessions with Eileen Joyce each week for a period of 8 weeks.

Why have I been selected/What are the benefits to my participating?
You have been selected to participate as part of a research study examining the pre and post effects of WRAP. Previous success with other groups, in running WRAP training, have inspired this research, as an area for careful consideration. Previous participants have reported that by attending WRAP sessions they "felt better informed about recovery generally", were "better able to identify and manage their symptoms", "felt more in control of their lives and their recovery", and were "less fearful about openly discussing the whole area of mental health and recovery". It is hoped that by running this group, you will experience similar benefits.

Do I have to take part?
No.....WRAP participation is completely voluntary. If you decide you do not wish to take part, your decision will be respected, and you will experience no resulting ill-effects. Similarly, if you decide to participate, and wish to dis-continue at any time, it is your right to do so.

Are there any risks to participating?
There are no risks to participation. The biggest challenge faced by each individual, will be to explore what he/she needs to do or have in order to take personal responsibility for maintaining daily wellness and recovery.
What will I be required to do if I participate?

Attend weekly 90 minute training sessions for 8 weeks. You will also be required to complete pre and post evaluation questionnaires, and this information will be used anonymously to evaluate the effectiveness of WRAP.

What happens when the research stops?

When the research ends, you will have the choice to attend further, less frequent top-up sessions in WRAP, as well as 1:1 therapeutic sessions where required.

Will my taking part in the research be kept confidential?

Yes. Everything that arises in the group will remain anonymous and confidential, with the exception of someone expressing suicidal tendencies, harm to self or harm to others.

What will happen to the information contained in the pre and post research questionnaires?

Names and identities of each individual will remain anonymous and confidential. Questionnaires will be kept under lock and key and stored in a locked filing cabinet. The overall results of the WRAP intervention will be presented as part of a doctoral research thesis, and publication of same in journals of relevance, is intended to follow.

Further information and contact details:

If you require any further information in relation to this study, or participation in WRAP please do not hesitate to contact me at Quest Brain Injury Services, Galway.

Thankyou for your time and co-operation.

Respectfully,

Denise O’Dwyer, Reg. Psychol. CPsychol.
Chartered Psychologist
Wellness Recovery Action Planning: An evaluation

Client Identification Number for this trial:

CONSENT FORM

Name of Researcher: _____________________________

Please initial box

1. I confirm that I have read and understand the information sheet dated ............ for the above programme. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rehabilitative training being affected.

3. I agree to take part in this study.

Name of Client _____________________________ Date _____________________________ Signature _____________________________

Name of Person taking consent _____________________________ Date _____________________________ Signature _____________________________

Quest Brain Injury Services
9A Liosbain Business Park, Tuam Road, Galway, Ireland.
T +353 91 77 8850 F +353 91 77 8868
E: quest@mbh.ie W www.questbraininjury.com

Inclusive Training . Inclusive Education . Employment Access
13th September, 2012

Dear

I hope this letter finds you well.

I am writing to you, as I am carrying out a piece of research regarding the benefits of attending a Wellness Recovery Action Programme. This is an 8 week programme for the current clients of the Quest centre. It is designed to help individuals maintain positive mental wellbeing following an acquired brain injury. In particular, I am interested in examining whether or not current clients who have the opportunity of engaging in this programme, will report more positive effects on mood and stress levels, as distinct from our past clients.

Depending on feedback, if there appears to be sufficient need and interest, we may consider offering this course to former clients also. Towards this goal, we would very much appreciate you completing and returning the attached questionnaires in the enclosed stamped addressed envelope to the Quest centre.

Thank you most sincerely for your time in advance. If you need any further clarification, please feel free to call the Quest centre.

Please note your name will remain anonymous throughout the study, this is only required for initial administration and scoring of the questionnaires.

With best wishes

Denise O'Dwyer, Reg. Psychol. C.Psychol.
Chartered Psychologist
WRAP Pre and Post Survey

Adapted by Denise O’Dwyer (2011) from the Copeland Wellness and Recovery Survey.

Name:
Age:
Today's Date:

1. Do you take responsibility for your own wellness? ☐ ☐

2. Do you feel it is important to educate yourself about the symptoms you experience ☐ ☐

3. Do you know how to advocate for yourself to get what you want/need? ☐ ☐

4. Do you like yourself? ☐ ☐

5. Do you feel supported in your daily struggles? ☐ ☐

6. Do you have any special things you do every day to insure you are taking good care of yourself? ☐ ☐
   e.g. exercise, food supplements, counselling, meditation, talking to friends/family, visualisation, affirmations

7. Do you know what triggers you into feeling unwell? ☐ ☐

8. Do you have a plan in place of a list of things to do, if you feel triggered? ☐ ☐
9. Can you identify early warning signs that your symptoms are worsening?

10. Do you know how to change negative thoughts to positive ones?

11. Do you have supporters/people who can help you through, if you are experiencing a crisis?

12. Do you think your lifestyle helps you to feel better and enables recovery?

13. Do you think there are aspects of your current lifestyle that need to change, in order for you to feel better?

14. Do you feel empowered and in charge of your positive mental health?
Mental Health Recovery Measure (MHRM)©

(Young & Bullock, 2003)

Name: ___________________________ Date: ________________

The goal of this questionnaire is to find out how you view your own current recovery process. The mental health recovery process is complex and is different for each individual. There are no right or wrong answers. Please read each statement carefully, with regard to your own current recovery process, and indicate how much you agree or disagree with each item by filling in the appropriate circle.

SD = Strongly Disagree  D = Disagree  NS = Not Sure  A = Agree  SA = Strongly Agree

1. I work hard towards my mental health recovery.  SD D NS A SA
2. Even though there are hard days, things are improving for me.  SD D NS A SA
3. I ask for help when I am not feeling well.  SD D NS A SA
4. I take risks to move forward with my recovery.  SD D NS A SA
5. I believe in myself.  SD D NS A SA
6. I have control over my mental health problems.  SD D NS A SA
7. I am in control of my life.  SD D NS A SA
8. I socialize and make friends.  SD D NS A SA
9. Every day is a new opportunity for learning.  SD D NS A SA
10. I still grow and change in positive ways despite my mental health problems.  SD D NS A SA
11. Even though I may still have problems, I value myself as a person of worth.  SD D NS A SA
12. I understand myself and have a good sense of who I am.  SD D NS A SA
13. I eat nutritious meals everyday.  SD D NS A SA
14. I go out and participate in enjoyable activities every week.  SD D NS A SA
15. I make the effort to get to know other people.  SD D NS A SA

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<td>16.</td>
<td>I am comfortable with my use of prescribed medications.</td>
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<td>17.</td>
<td>I feel good about myself.</td>
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<td>18.</td>
<td>The way I think about things helps me to achieve my goals.</td>
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<td>19.</td>
<td>My life is pretty normal.</td>
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<td>20.</td>
<td>I feel at peace with myself.</td>
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<td>21.</td>
<td>I maintain a positive attitude for weeks at a time.</td>
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<td>22.</td>
<td>My quality of life will get better in the future.</td>
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<td>23.</td>
<td>Every day that I get up, I do something productive.</td>
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<td>24.</td>
<td>I am making progress towards my goals.</td>
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<td>25.</td>
<td>When I am feeling low, my religious faith or spirituality helps me feel better.</td>
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<td>26.</td>
<td>My religious faith or spirituality supports my recovery.</td>
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<td>27.</td>
<td>I advocate for the rights of myself and others with mental health problems.</td>
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<td>28.</td>
<td>I engage in work or other activities that enrich myself and the world around me.</td>
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<td>29.</td>
<td>I cope effectively with stigma associated with having a mental health problem.</td>
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<td>30.</td>
<td>I have enough money to spend on extra things or activities that enrich my life.</td>
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*Thank you for completing this measure.*

The MHRM© was developed with the help of mental health consumers by researchers at the University of Toledo, Department of Psychology. This research was supported through a grant from the Ohio Department of Mental Health, Office of Program Evaluation and Research. For further information, please contact Wesley A. Bullock, Ph.D. at (419) 530-2721 or email: wesley.bullock@utoledo.edu.
WRAP

WELLNESS TOOLS ARE SAFE, SIMPLE, AND ACCESSIBLE

DAILY MAINTENANCE PLAN

The Daily Maintenance Plan helps you recognize those things which you need to do to remain healthy, and then plan your day accordingly.

1. What I'm like when I'm feeling well:
   A list about me describes me when I'm feeling well

2. A list of things you need to do for yourself every day to keep yourself feeling happy and healthy

TRIGGERS

Triggers are external events or circumstances that, if they happen, may produce signs that are, or may be, very uncomfortable. Triggers Action Plan is my building a positive response for me to get back to where I need to be.

EARLY WARNING SIGNS

In spite of our best efforts at staying well, we begin to experience subtle signs of change that indicate we may need to take further action. Early Warning Signs Action Plan is to help me in gaining control on my wellness and what is going to help me to do this.
WRAP

WHEN

THINGS

ARE

BREAKING

DOWN

CRISIS

PLANNING

Crisis Planning:
In spite of our best efforts, our symptoms may progress to the point
Where they are very uncomfortable, serious or dangerous.
But we are still able to take some action on our own behalf.

Signs that others need to take over:
Describe signs and symptoms that indicate others need to take over responsibility for your care and make decisions on your behalf.

Supporters- here is a list of those people you want to take over for you when the symptoms first come up:

Help from others-what I need my supporters to do for me that would help me to feel better:
Choose 1st
Things to avoid

POST CRISIS PLAN

The need for the addition of a Post Crisis Plan came from the realization that it takes as long to recover from a Crisis as it does from any other major illness or surgery. We need assistance and support that can be gradually reduced as we feel better and better.

When my supporters no longer need to use this Plan when you feel better, your supporters will no longer need to follow this plan.

When Things are Breaking down Action Plan:
This plan now needs to be very specific with your doctors and other healthcare providers.

Medication- the information on my health, my treating clinicians, my medication, the dosage and reasons why I take them and the medications I do not want to be administered.

Treatments- there are particular treatments I would like to be used in a Crisis situation and some I want to avoid.

You may need a safe facility. Be taking medication that needs to be monitored. Make a list of treatment facilities where you would prefer to be hospitalized, but these you wish to avoid.

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The Wellness Recovery Action Programme is a structured self-management system, for monitoring everyday mental health functioning.

Through a series of planned actions and responses, one can maintain positive wellbeing, while simultaneously modify, reduce or eliminate symptoms of distress.

WRAP also includes a list of instructions for others, when symptoms make it impossible for an individual to continue making better informed decisions for themselves.

The WRAP system was initially developed to assist individuals experiencing psychiatric symptoms.

WRAP can be easily adapted for use with any disorder, or symptom of mental ill-health.

WRAP starts with the development of a Wellness Toolbox.

The Wellness Toolbox encapsulate the overarching concept of WRAP. It is a list of things an individual has done in the past, or could do in the future, to assist staying well.

DAILY MAINTENANCE PLAN

1. A description/list of words to identify how the individual feels when they are well. (creates a printed reminder of what feeling well looks like).

2. Generation of a list of the things one needs to do every day to maintain their wellness – e.g. get out of bed when alarm clock rings.

3. Creation of a list of optional extras an individual may consider doing to maintain wellness. e.g. scheduling appointments with dentist/doctor, planning a weekend away etc.
PART 2
TRIGGERS

Triggers may be defined as external people, events or circumstances which trigger symptoms of distress within the individual. While Triggers may cause a negative reaction, when clearly identified, they can be better managed, through a series of planned strategies and responses.

1. Identify people, events or situations which cause negative reactions or uncomfortable symptoms.


PART 3
EARLY WARNING SIGNS

Early Warning Signs are internal warnings or subtle signs of change, which may indicate a need to take further preventative action. These internal signals may be noted by the individual, or alerted to a close family member or friend.

1. Individuals are encouraged to identify unique, internal warning signs. e.g. becoming increasingly irritable, experiencing symptoms of insomnia, poor appetite etc.

2. Develop an Action Plan which comprises a list of step to regain control of wellness if any of these early warning signals are felt or observed.

PART 4
WHEN THINGS ARE BREAKING DOWN

In spite of one’s best efforts, things may progress to the point where symptoms may become extremely uncomfortable, serious or dangerous.

It is important to emphasize at this point that even though signs are more noticeable (sometimes only to others), the individual is still in a position to advocate and take action on his/her own behalf.

PART 5
CRISIS PLAN

The Crisis Plan presents a list of symptoms which indicate the individual is no longer best positioned to advocate on his/her own behalf. The plan is drawn up by the individual when he/she is in a well state and can clearly identify their unique crisis point symptoms. The crisis plan is acted on by supporters and/or other health care professionals, when, where and if needed.

It includes information such as identified symptoms of wellness and unwellness, indications of when an advocate needs to take over, identified support persons, prescribed medications, allergies, preferred treatments and facilities, home/community/respite care.
PART 6

POST CRISIS PLANNING

Post Crisis Planning is a review process. It creates a timetable for the individual to gradually resume their life responsibilities, e.g. preparing to return to work, as well as the necessary steps required for resumption of their Daily Maintenance Plan.

It guides supporters in recognizing when to hand back responsibility to the individual.

It is a time for individuals to review issues which may have arisen during their period of ill-health, and addressing such matters in moving forward.
My WRAP Wellness Plan
1: **What I am like when I’m well**, eg. happy, quiet, loud, motivated etc

2: **My Wellness Toolbox** — eg. daily shower, adequate food, rest etc

3: **My Daily Maintenance Plan**

Eg. get up at 8am, Shower, have breakfast, x/y activity

4: **My Triggers**: People, situations, External circumstances that cause me to feel unwell.

5: **Action Plan/Strategy for dealing with Triggers**, eg. go for a walk, talk to a friend
**6: Early warning signs:**
Internal signs that signal I’m not feeling 100% eg Headaches, Irritability

**7: Action Plan/Strategy around early warning signs,** eg. seek professional help/advice, alert one of my supporters

**8: Crisis:- when I need someone else to take over** -> I am no longer the best person to self advocate and I need someone else to take over, and act on my behalf.

Identify supporters (2 if possible) whom I trust to act on my behalf:

What things should they do that would help. Eg. Talk to doctors, water my plants, be positive.
Identify things that don’t help when I’m in crisis.

9: Post Crisis Plan - How will others know it’s time to step back and let me resume responsibility

What have I learned from this experience?