

PCT50
Saturday 24th July 2010 9am-5.30pm
Delegate List
 (last updated 12th July 2010)

<i>Name</i>	<i>Affiliation / Address</i>
Bill Powers	Lafayette, Colorado, USA
Tim Carey	Centre for Remote Health, Flinders University & Charles Darwin University, Australia
Sergio Pellis	University of Lethbridge, Canada
Heather Bell	University of Lethbridge, Canada
Kent McClelland	Grinnell College, Iowa, USA
Fred Good	Chapel Hill, USA
Rick Marken (via video link)	Independent Consultant, California, USA
Chris Spratt	Levenmouth Mental Health Team, Fife, UK
Warren Mansell	University of Manchester, UK
Sara Tai	University of Manchester, UK
Graeme Reid	Arundel House Mental Health Resource Centre, Liverpool, UK
Heather Leggett	University of Manchester, UK
Caron Westwood	University of Manchester, UK
Susan McCormack	University of Manchester, UK
Lydia Morris	University of Manchester, UK
Filippo Varese	University of Bangor, UK
Yu Li	University of Manchester, UK
Jason Wright	University of Manchester, UK
Hannah Gaffney	University of Manchester, UK
Rebecca Kelly	University of Manchester, UK
Savas Akgonul	University of Manchester, UK
Tim Bird	University of Manchester, UK
Philip MacNamee	University of Manchester, UK
Clive Ferenbach	Cameron Hospital, Fife, UK
Unnur Tomasdottir	University of Manchester, UK
Kieran Lord	Trafford cCBT Services, Trafford, UK
Trishna Patel	University of East London, UK
Miriam Samad	University of Manchester, UK
Oliver Schauman	University of Manchester, UK
Alisha Gibson	University of Manchester, UK
Zac Fitzgerald	Manchester, UK
Pamela Fox	Hotel Villa Nirvana, Pie de la Cuesta, Mexico
Elizabeth Pappas	Hotel Villa Nirvana, Pie de la Cuesta, Mexico
Phil McEvoy	Salford Primary Care Services, Salford, UK
Elly McGrath	University of Manchester, UK
Ingrid Hickman	Manchester, UK
Styliani (Stella) Gkika	University of Manchester, UK

Poster/Paper Abstracts

(Please see full draft programme on pctweb.org for abstracts of the main presentations and for papers to download)

Factors affecting acceptance or rejection of Perceptual Control Theory in students and academics

Alisha Gibson, University of Manchester, UK

The research employed qualitative and quantitative methodology in two studies to investigate the factors affecting acceptance or rejection of Perceptual Control Theory (PCT) in students and academics. The research sought to investigate specifically the role of pre-existing attitudes in eventual acceptance of the theory, and whether exposure to the theory may in turn lead to a change in attitudes; and whether factors concerning the nature of the theory itself, or other factors, were instrumental in shaping eventual acceptance of PCT. Study One involved a questionnaire administered to students measuring attitudes associated with acceptance of PCT before (Time 1) and after (Time 2) taking a module in PCT. Analyses of Covariance revealed that students had significantly more positive attitudes to PCT at the end of the module (Time 2) when compared with a comparison group, with attitudes at Time 1 as a covariate. Attitudes at Time 1 also explained a significant proportion of the variance in attitudes of Time 2. Eventual acceptance of the theory was related to attitudes at Time 2, but not at Time 1. Study Two involved a thematic analysis of interviews with academics and clinicians familiar with PCT about why they consider the theory acceptable or not. Several themes were identified as important factors in the acceptance of a theory, some of which pertained to PCT specifically while others were more general. The key findings of the research were that 1) acceptance of the theory is related to attitudes held by the individual. 2) exposure to the theory may lead to a change in attitudes. 3) different individuals may judge the same theory by the same criteria and yet appraise it differently. Summarily, factors other than the scientific content of the theory itself are implicated in whether or not it will be accepted.

The role of reorganisation in insightful problem solving

Philip McNamee, University of Manchester, UK

Introduction: Insight is a popular research topic in psychology but no consensus as to the underlying mechanisms exists. The phenomenological experience of problem solvers has been little explored despite the 'Aha!' moment being purely subjective. PCT speculates that problems are solved through a process of reorganization which would result in an unexpected and sudden 'pop-out solution', a common occurrence in insight. The study aimed to qualitatively explore the experience of participants to see if emergent themes mapped onto predictions made by PCT.

Method: Twenty students were recruited and asked to complete a battery of three different types of problem (anagrams, remote associate tasks and intrapersonal problems) designed to elicit insightful problem solving. A short semi-structured interview followed in which the investigator tried to access the subjective feelings experienced and the problem strategies used by the participant. Following this there was a 2nd phase whereby another set of problems were completed (with the addition of rebus puzzles). Participants were asked to be more mindful of their experiences and strategies by thinking aloud. Another short interview that tried to gain more detail on the processes that the participants were aware of was conducted. The transcripts were fully transcribed and then analyzed using Thematic Analysis.

Results & Discussion: Preliminary findings from initial participants show that participants rely on non-volitional strategies to solve some of the problems. Categories such as luck, letting things fall into place and suddenness are common. In addition problems aren't approached in a sequential order, they are randomly selected. Interpersonal problems showed less evidence for reorganization. PCT argues that reorganization is a random process of modifying control systems in order to achieve previously unattainable goals. Preliminary findings add evidence to this prediction. Participants set goals to solve problems, and answers appear suddenly and unexpectedly.

Reorganisation of Higher versus Lower Level Systems: A Computer Model

Savas Akgonul, University of Manchester, UK

Background: Psychological distress is something that most individuals will experience either directly or indirectly at some point in their lives. Many key researchers have noted the importance of fully understanding all aspects of a phenomenon as prevalent as this, emphasising the actual mechanism of psychological change as undoubtedly one of the most important aspects in need of investigation. This investigation has however, has proven challenging both methodologically and scientifically, as no coherent and comprehensive explanation of such a mechanism is available in the literature. This research intends to overcome these challenges and provide support for Perceptual Control Theory (PCT); a theory that provides an ideal framework on which a mechanism of change can be modelled.

Aims: To provide tangible evidence towards a definition of the mechanism of psychological change according to the principles of PCT, thereby contributing to the transdiagnostic approach and further the evidence base of both PCT and the cognitive psychotherapeutic approach which draws on this theory, the Method of Levels.

Method: Computer software programmed according to the guiding principles of PCT will be used to simulate control in a 3 tier hierarchy of control systems. Before beginning trials with the design described above, a single control unit will first be piloted to ensure the hierarchy is 'controlling' against a simple environmental disturbance. Subsequently, additions will be made to the hierarchy, whilst ensuring the simulation is still in control, until the design proposed for the main trials is reached. This design will then be used in multiple trials, under 3 different conditions. These conditions are; 1) Simulation without reorganisation, 2) Simulation with Mid level (Tier 2) Reorganisation, and 3) Simulation with higher level (Tier 3) Reorganisation. Error will be calculated both immediately before and directly after reorganisation has ended, for each condition. These readings will then be used to statistically analyze the differences in total error reduction between simulations with different 'loci of reorganisation', with the aim of supporting the hypothesis that higher level reorganisation is more efficient at reducing error than lower level reorganisation.

Evidence for arbitrary control as a transdiagnostic construct: Using structural equation modelling to identify a single shared process in depression

Timothy Bird, University of Manchester, UK

In recent years researchers have increasingly recognised the existence of cognitive and behavioural processes that are elevated in patients with a wide range of psychological disorders (Harvey et al., 2004; Mansell et al., 2009). According to the transdiagnostic approach to CBT, targeting such processes during therapy will enable the development of simple interventions that are effective across disorders. Research to identify these processes is therefore important. Control, as defined by PCT (Powers, 1973), is expected to exist as a transdiagnostic process underlying psychological dysfunction (Carey, 2008). It is therefore expected that measured cognitive maintenance processes represent different aspects of control. Structural equation modelling (SEM) has previously been shown to be an effective way of exploring the presence of transdiagnostic processes (Field & Cartwright-Hatton, 2009). Here, SEM was used to investigate the existence of a single cognitive process, thought to represent arbitrary control, which will predict depression. Two models were constructed: the first treats measured cognitive processes (eg rumination, worry) as separate predictors of depression, while the second treats them as indicators of a single, higher-order latent variable. Goodness-of-fit tests suggest that the best conceptualisation of these processes as explanations of depression is provided by the single latent factor model. A factor analysis was then carried out to explore this latent factor. The results of this analysis are consistent with the hypothesis that the latent variable in the model represents the process of arbitrary control.

Cognitive and behavioural maintenance processes as attempts of arbitrary control

Trishna Patel, University of East London, UK

Cognitive Behaviour Therapy research to date has focused on studying the role of cognitive and behavioural processes in the development and/or maintenance of symptoms in specific psychological disorders. Theorists are now beginning to highlight the commonalities in these processes across multiple disorders i.e. *transdiagnostic approach* (Harvey *et al.*, 2004). This is an emerging theory in the early stages of empirical evaluation. To identify transdiagnostic processes of interest, a measure called the Cognitive and Behavioural Processes Questionnaire (CBP-Q) was developed. The CBP-Q was administered to a mixed clinical group (n=80) and a control group: student (n=172) and community (n=57), to undertake preliminary analysis of its psychometric properties and its relationship with symptom-based measures. A principle component analysis resulted in a 13-item version of the CBP-Q, consisting of one theoretical construct: *arbitrary control*. Arbitrary control involves the attempt to control behaviour based on a specific personal goal system, whilst inhibiting another goal system that also regulates that behaviour (Powers, 1973). Theorists propose that this creates conflict; both control and conflict have been associated with distress across numerous psychological disorders (Mansell, 2005). Findings from the study suggest that arbitrary control may in fact be a *transprocess*, the theoretical implications of which will be discussed.

The importance of conflict and arbitrary control in predicting problems managing everyday emotions and behaviours

Rebecca Kelly, Miriam Samad, Warren Mansell & Alex Wood, University of Manchester, UK

This research investigated how goals to express or suppress emotions and behaviours related to problems managing emotions and behaviours in six different domains: anger, anxiety, excitement, eating tasty food, drinking alcohol, and shopping. According to Perceptual Control Theory (PCT; Powers, 1972), conflict is central to psychopathology, and controlling one's experiences arbitrarily is dysfunctional.

A sample of 192 undergraduates rated the overall importance of their reasons for allowing themselves to express certain emotions and perform certain behaviours (expression), and the importance of their reasons for not allowing themselves to do so (suppression). They also rated the extent to which they had problems managing each emotion and behaviour, and completed self-report measures of well being and psychological symptoms.

Multi-level modelling analyses were performed, using a domains-within-individuals design. The results indicate that 1. The presence of internal conflict between goals for controlling emotions and behaviour is problematic, and causes distress, in line with PCT. 2. If one's goals are in conflict with the consensus of a group as a whole, this is problematic. This consensus could reflect either a cultural rule or an accurate view of adaptive goals for managing the emotion or behaviour. In PCT terms this conflict could be viewed as arbitrary control. 3. There is the additional problem of attaching high importance to goals for suppression of emotions or behaviour, whether or not these goals are in consensus with the group. Suppression may be problematic because it implies rigid control, or because it prevents awareness and communication.

Implications for effective therapy and MOL specifically: Effective therapy should encourage people to talk about their problem and associated emotions, thus bringing them into awareness. It should also allow people to consider the amount of importance they attach to their goals and what is driving this. Finally, once in awareness, conflicting goals should be considered and reprioritised to improve functioning.

Investigating the processes that underlie maintenance behaviours

Heather Leggett, University of Manchester, UK

There has been a recent shift towards a transdiagnostic approach to psychological disorders, hypothesising that similar cognitive processes underpin different psychological disorders. These processes include thought suppression, safety behaviours, rumination, avoidance behaviour, self-focused attention and self-criticism. It has been suggested that these processes share an underlying commonality called 'arbitrary control' (Mansell, W. (2005). Control theory and psychopathology: An integrative approach. *Psychology and Psychotherapy: Theory, Research and Practice*, 78, 141–178). In everyday life individuals may experience conflict between two goals, e.g. one may want to appear independent at work, but may also need the help of a colleague. Arbitrary control maintains this conflict since it ignores control systems already governing one's behaviour. This research aimed to determine whether the process of arbitrary control is common to a range of cognitive and behavioural maintenance processes. The research also aimed to determine whether arbitrary control is a more significant predictor of distress and functional impairment than prominent maintenance processes are. The research measured participants' engagement in a selection of cognitive and behavioural maintenance processes as well as engagement in arbitrary control. Participants' engagement in cognitive and behavioural processes was assessed using a battery of questionnaires; the White Bear Suppression Inventory, the Penn State Worry Questionnaire, Acceptance and Action Questionnaire, Reorganisation of Conflict Scale, the Ambivalence over Emotional Expressiveness Questionnaire and the Intolerance of Uncertainty Scale. A test designed by Dr Warren Mansell and Heather Leggett using the computer programme e-prime was used to assess individuals' engagement in arbitrary control. This measure has 18 domains which measure behaviours, thoughts and feelings. The domains are thought to involve arbitrary control and can also be represented as maintenance processes. Participants' levels of depression, anxiety and functional impairment were also measured during the study and four weeks later using the Depression, Anxiety and Stress scale 21, and the Work and Social Adjustment Scale. Significant findings will help to demonstrate the importance of arbitrary control in clinical psychology, provide support for the transdiagnostic approach to CBT and provide more support for the development of transdiagnostic treatments.

Book Review: *Hold That Thought: Two Steps to Effective Counselling and Psychotherapy with the Method of Levels*, Timothy A. Carey.

Kieran Lord, University of Manchester, UK

With regular billing at recent BABCP events including a full-day workshop on control theory at the 2010 BABCP conference, the 'Method of Levels (MOL)' therapeutic approach and 'Perceptual Control Theory (PCT)' (Powers, 1973) on which it is based are clearly given substantial attention in modern Psychology circles. But what is MOL and how is it applied to promote change in a clinical setting? The review details the content of this affable and engrossing book chapter by chapter, considering its place within this exciting emerging approach to cognitive therapy. The short book follows Tim Carey's more theoretical and comprehensive introduction to the approach, 'The Method of Levels: How to do Psychotherapy Without Getting in the Way' (2006). Introductory chapters develop the importance of control, conflict and levels of hierarchy. Then reorganisation in control systems as a form of learning is presented, followed by how the therapist can assist in bringing attention to the level that requires this process (by questioning disruptions); and maintaining it so change can occur. The final chapters highlight how the MOL therapist does not 'get in the way' of change; they also summarise the importance of encouraging people to talk (about what is in awareness), and to notice and question disruptions. With the 141 pages suffused with amusing anecdotes, cartoon drawing, and extra information/alternative explanation boxes the book serves its assumed purpose as an introductory work to engage open-minded therapists in MOL practice.

MYLO: A computer-based MOL therapist and control system*Jason Wright, University of Manchester, UK*

When I was writing this abstract I swore at my computer more than once. My computer is actually quite a good listener, but only recently has it started to respond in a helpful way – since I wrote MYLO. MYLO is a computer-based therapy application developed at the University of Manchester embracing the principles of the Method of Levels (MOL; Carey, 2006) and Perceptual Control Theory (Powers, 1973). MYLO sports a familiar messenger-style user interface allowing conversations to take place in plain text as if conversing with a remote friend. MYLO searches the provided text for MOL-relevant conversational themes, and asks a question based on those themes. MYLO's questions are designed to encourage higher-level thinking, aiming to direct awareness to the source of internal conflict, facilitate reorganisation, and consequently reduce distress. It is a tall order for a novice, and MYLO is well aware that not every question posed will prove helpful to the client; however MYLO has a goal to be a good therapist and works tirelessly towards achieving this goal. MYLO's goal-oriented behaviour is refined by learning what works for clients, and what does not; by monitoring errors arising in his control system hierarchy. Consequently MYLO repeats behaviour that reduces the error between performance and goal, whereas control system arrangements that do not will be re-organised. Every interaction with MYLO therefore represents a learning opportunity for both members of the conversation, with both capable of reorganisation based on each other's feedback. Come and say hi to MYLO at PCT50!

Can computer-based problem-solving be effective for everyone?*Hannah Gaffney, University of Manchester, UK*

Perceptual Control Theory (PCT; Powers, 1973) posits that all distress is a symptom of internal conflict and elimination of a conflict is through a trial and error process called reorganisation (Powers, 1973). Thus, PCT can provide a rationale for why various psychological treatments often afford similar outcomes (Wampold, 2001). PCT has been applied therapeutically by Carey (2006) in a successful treatment known as MOL (see Carey & Mullan, 2008). This study assesses the efficacy of the application of MOL to a computer-based problem solving program called 'Manage Your Life Online' (MYLO). Also, it is investigated whether this form of problem-solving can be effective for everyone. Twenty three undergraduate students attended two sessions with MYLO, two weeks apart. Participants completed a measure of attitudes towards computer-based problem solving and measures of psychological distress before and after using MYLO. Results indicated there was a significant difference in distress scores between Stage 1 and Stage 2 demonstrating that MYLO is effective at aiding problem solving. No direct correlation was found between attitudes towards computer-based problem solving and reduction in distress. However, attitudes towards computer-based problem solving were significantly correlated with how useful participants rated MYLO, their likelihood of using MYLO again and whether they would recommend it to others. It is concluded that the MYLO program may not suit everyone except this finding will require further research. However, it seems evident that MYLO is effective at reducing distress and provides an accessible and theoretically grounded aid to problem solving.

Mechanisms of mindfulness: a Perceptual Control Theory account*Lydia Morris, University of Manchester, UK*

Research is ongoing regarding the mechanisms that promote symptom improvement in clients who have received mindfulness, based on meditation, therapy. An Interacting Cognitive Subsystems (ICS) framework suggests the importance of change being affected through an effective interchange at higher levels of processing. A recent qualitative study of clients with depression who completed Mindfulness Based Cognitive Therapy (MBCT) identified four themes, one of which was control and another struggle. Previous research suggests that maladaptive discrepancy based processing is an important activation and maintenance mechanism of depression, this process has been conceptualised as a conflict between internal reference values and a facet of this process is rumination. It is proposed that a model which explains this data is Perceptual Control Theory (PCT). Mechanisms proposed to precipitate symptom reduction are: resolution of maladaptive conflicts in opposing, higher level, internal reference values and reduction of arbitrary control

processes (maladaptive rumination is an arbitrary control process). It is hypothesised that the mechanism which promotes symptom improvement is reorganisation of the properties of clients' control systems and thus the formation of more adaptive reference values; and the extent to which this reorganisation occurs will be mediated by reduction of maladaptive inner conflict and arbitrary control. In order to examine the proposal that PCT may provide a valid account of the mechanisms of MBCT this study will use a mixed method design. Quantitative data will be collected at multiple time points during mindfulness courses; qualitative data will be collected using Interpretative Phenomenological Analysis (IPA).

Ambivalence in help-seeking: the loss of valued control paradigm

Oliver Schauman, University of Manchester, UK

The non-attendance of initial therapy appointments is a prominent problem. This is primarily because it may mean that people, who are in need of therapy, are not successfully accessing it. Many of the behavioral models point out a plethora of different predictors of help-seeking behavior (readiness to change, salient beliefs, perceived control over behavior etc.). A comprehensive understanding of why people fail to attend their therapy appointments is however still lacking in the literature. Also, the effect of increased client control in improving the rates of attendance in therapy is not accounted for by these models. Perceptual control theory can therefore provide a clearer account of the ambivalence people feel towards seeking therapy. This is because, rather than focusing on behavior, PCT adopts control as a core construct in understanding thought processes and behavior. On the basis of this, it is proposed that *loss of valued control* is a common mechanism that underlies the ambivalence towards seeking therapy. This is because anticipation of losing valued control, as a result of seeking help, is assumed to lead to arbitrary control of the problem, which in turn results in uncertainty over accessing therapy. The success of increased client control is thus due to a decrease in anticipation of losing valued control. It follows that expectation of losing valued control is crucial to accessing therapy because it is the core process in the factors that may lead a person to avoid therapy.

PCT in Education: A PCT Structured School

Unnur Tomasdottir, University of Manchester, UK

Perceptual Control Theory (PCT) developed by William (Bill) Powers (1960, 1973) has come a long way in the last fifty years. Thanks to people such as Tim Carey, Kent McClelland, Ed Ford and many others, PCT has found its way into therapy, sociology, and education.

In education PCT has inspired some innovative work. Ed Ford's PCT inspired disciplinary system Responsible Thinking Process (RTP) has been successfully adopted in many schools. In RTP (2004) the student learns and is motivated to be responsible for his/her own behaviour.

Tim Carey and Thomas Bourbon (2004, 2006) also discussed discipline in schools, with specific attention on countercontrol. Countercontrol is defined by the authors as "action taken by a controllee to systematically produce behavioral effects in a controller" (Carey & Bourbon, 2004).

Tim Carey (unpublished manuscript) has also come up with ideas of curriculum delivery in a PCT manner. This curriculum delivery involves a change of the teacher's perspective and can thus lead to a more felicitous teaching and learning.

Cary Cziko (1995) stresses the importance of delivering education in a PCT manner, i.e. rather than attempting to transmit knowledge, it should be presented to the student for him/her to discover for him/herself.

However, all these great ideas and methods have so far never been combined into a single PCT structured school where under the philosophy of PCT, the curriculum delivery, methods of teaching and disciplinary system suggested above will all work together to provide the best education. The poster will consider the issues around developing such a structured school.

In a PCT structured school all the aspects of teaching and learning will be guided by PCT, the material will be presented as suggested by Cziko and Carey, the disciplinary system will be Ed Ford's RTP following rules agreed on by students, teachers and administrators. This will hopefully result in an atmosphere where both students and teachers alike will be happy and willing to do their work because everyone is able to control their perception without creating a significant disturbance to others.

A phenomenological study of the process of change: The role of spirituality in the recovery model from forms of psychological distress as it relates to substance misuse; psychosis, depression, eating disorders

Susan McCormack, University of Manchester, UK

Many gaps remain to be filled in our understanding of the issues related to psychosis, substance use and dependence. Over 13 million people are likely to need some type of treatment for substance abuse and related prophylaxis approaches to medical care. Conflict from more than one control system is manifested in different ways; irritability and sudden mood change: Activation (thoughts racing and restlessness): Depression (depressed mood and hopelessness): Well-being (feelings of capability and energy) Mansell, (2009) (12). Problems associated with psychotic experiences can be complex. Depressive disorders often co-occur with anxiety disorders and substance abuse (8). The development of strategies to reduce stress factors has become increasingly an accepted dogma (1). Clinical Psychologists have increasingly viewed spirituality as a positive component in the lives of many individuals (7). This therapeutic approach offers fresh insights into the role of goal conflict, automatic processes, imagery, perceptual distortion, and challenges reported correlations between faith, grace and "subjective well-being." In a recent study (24), 6 participants claimed to recover from chronic substance abuse and psychological distress as a result of a spiritual process of recovery known as a 12 step programme. They all alleged to have a reduced blood pressure (BP). The medical measurement of these claims is part of the proposal for further research. Perceptual Control Theory (PCT) is a fundamental theory of psychological functioning, focuses on scientific evidence in understanding the role of conflict in psychopathology. Perception is fundamentally a physical change, leaving physical traces in the body. The integration of Spirituality adopted into approaches such as CBT addresses the conflicted individual to resolve that conflict through a paradox of letting go of control. PCT offers a useful application predictor in the tendency to reorganize on perceptual, physical, spiritual and relational levels, through growth tendency, or drive toward self-actualization or a forward moving directional tendency in addressing relapse prevention.

The Student Perceptual Control Theory (PCT) Interest Group

Clive Ferenbach, Cameron Hospital, Fife, UK

The Student PCT Interest Group was set up in 2008 on the social networking site 'Facebook'. It is intended as a resource for undergraduate and postgraduate students around the world. The group is an informal way for students to: share ideas, news, and resources; pose questions; and make useful contacts. The group currently has over 70 members, and hopes to continue expanding. Individuals interested in joining the group can do so by firstly signing up to 'Facebook', and then carrying out a simple search for the group.

A Mixed Methodology Approach to Investigating Emotion Regulation Strategies

Elly McGrath, University of Manchester, UK

Past research has not been able to agree on a classification system for emotion regulation strategies, most likely due its reliance on theory driven preconceptions. This study investigated the control people hold over their own emotions, using both quantitative and qualitative methods, to tackle this. Quantitatively, Perceptual Control Theory's perspective on emotion was considered. Qualitatively, participant's personal and everyday emotions, as well as the strategies they use to control them, were investigated.

Data from a one week diary study was collected from twelve participants. For testing PCT, data was collected from three scales; current emotional intensity, ideal emotional intensity and effort made to regulate that emotion – based upon the most important emotion for that day for the participant, and also for an emotion witnessed in others. It was therefore hypothesised that the discrepancy between current and ideal emotional intensity should be proportional to the effort made to regulate the emotions.

Exploratory methods were implemented on the open ended questions within the diary entries for the qualitative investigation. From this a content analysis was performed on all emotions and regulation strategies recorded. Subsequently these were coded, underwent an inter-rater reliability assessment and were examined for obvious categorical trends.

Quantitative results showed significant Pearson's correlations in accordance with Perceptual Control Theory, for both self emotions and for others emotions. This was therefore followed up with multi-level modelling analyses. Qualitative results revealed that the most common emotion across both self and other data sets was anxiety, and the most common strategy was talking. Without using theoretical preconceptions a base classification for emotion regulation strategies became evident, which classified results into avoiding or addressing strategies.

This mixture of methods allowed for an in-depth analyses and better understanding of the qualitative data than previously seen. Results were then further compared to that of past literature in an attempt to define the best current classification method, how to improve future classification and to subsequently understand emotion regulation strategies more clearly and uniformly.