

The Rational Emotive Behaviour Therapist

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Editorial

Welcome to this bumper issue of *The Rational Emotive Behaviour Therapist*. Inside you will find a message from David Baker (the new AREBT Chair) and an update on Accreditation Matters from Meir Stolear. We are also pleased to include a range of interesting articles covering topics such as Anger, Resilience, Dog Behaviour Problems and The Use of Humour in REBT. We have also made some changes to the look of this issue to include photographs and biographies of our contributors.

For future issues case studies, book reviews, research, and papers focusing on REBT and Cognitive Behaviour Therapy are welcome.

On a final note we would like to thank all of the contributors to this issue.

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Message from the New Chair

David Baker

Dear Colleagues,

Before expressing my thoughts as your new chairman I wish to pay tribute to the work of the retiring Chair, Irene Tubbs. It is only those who have been intimately involved in voluntary work in organisations such as ours, who will have any real appreciation of the energy and commitment Irene has dedicated to AREBT. I trust I shall be a worthy successor so the organization will continue to prosper.

I had mixed feelings when I was elected as the new chairman of AREBT at our conference this year. On the one hand I felt honoured to be appointed, but also experienced some concerns because my style will be different from Irene's, since I have made it clear to the committee already that I am not prepared to carry out tasks which fall outside the traditional role of heading an organization.

I have worked as an independent practitioner now for almost twenty five years. I am very familiar with the struggles required to maintain the highest professional standards and run a caring, successful, practice. This is one of the reasons why I set up the independent practitioners group within BABCP and I still remain its chairman. It is hard work and I fear over the next few years it is going to become harder. For a number of years I was a member of the executive board of BABCP and was its treasurer for three years. I would describe myself as a dedicated REBTer in the best sense. This is my preferred modality within the CBP framework. I believe in the work, I use it every day, and it is the main reason why I agreed to take on the role as your chairman because I wish to see REBT prosper in the UK.

All organisations reach a stage in their growth where, if they wish to continue that growth, then paid administrative support has to be provided – it really is 'chicken and egg' – members rightly expect professional service from their professional body – but that requires ever increasing amounts of time which most independent practitioners just cannot give. Irene, by her determination and dedication has helped to bring AREBT to the point where if it is to expand, it seriously has to consider how it can fund the necessary support staff, and ensure that those who give of their time, at the very least, will not be expected to fund postage and travelling expenses out of their own pocket as well.

As the chief negotiators with BABCP, Irene and Meir Stolear, our accreditation officer, have enabled joint accreditation standards with BABCP – a real step forward - members are beginning to enjoy tangible benefits. This, together with the creation of the joint UK register with BABCP, gives AREBT an opportunity to promote the therapy and our work. However we shall need to increase our funding base to enable us to flourish – so that with increased benefits it is not unreasonable to expect our very modest subscription fees to increase.

In just a few words it is difficult to encapsulate the challenges and exciting times ahead for REBT, however I do see regulation – or the lack of it, as one of the central tasks to be tackled. BABCP and AREBT have steadfastly maintained the highest standards of accreditation and practice, on a voluntary basis. Government through its regulatory bodies, are unwilling to protect the title of CBP. I believe this to be unsupportable - it's fair to observe the politi-

cians have created a real mess, not helped by the many therapy bodies afraid of tight regulation over standards of training and practice. We will not countenance a doctor or midwife 'laying hands on patients' unless they are properly regulated. This type of regulation should also apply to those who treat the psychologically distressed. Already a lack of protected title is leading to a diminution of standards as providers' contract therapists who are able to call themselves CB psychotherapists, but are nothing of the sort.

Raising the profile of REBT, so that users understand the value of our seminal CB therapy is another task I wish to tackle. Some IAPT providers are using REBT whilst others seem to expressly discourage its use, and the Roth and Pilling competencies for IAPT training make no mention of it – this really is an omission which needs adjusting.

I was most encouraged to feel a 'fresh atmosphere' at the conference from new members who have joined the committee at the same time as me. I hope that I can channel that energy and allow all the experience and enthusiasm to be realized.

I would like to see our conference increase in importance. We have some new conference co-ordinators of great experience. Helping others to share our experience of practicing REBT at conference is a central way of promoting the organization, as is research and the dissemination of the large body of research which already exists.

I hope that we can continue to forge links with BABCP, however part of my work will be to encourage BABCP to realize that since they have agreed to represent AREBT in matters of joint interest this comes with a responsibility to seek our views in respect of those matters, before negotiations or decisions are taken.

Ellis was always generous in recognizing the work of others. It is a shame that many mainstream and the so called 'third generations' of emerging therapies, fail to acknowledge his ideas which are clearly evident in much of their work.

REBT still retains the psychological and philosophical underpinnings identified by Ellis. I hope that my term of office will ensure this can continue, that REBT will expand and retain its 'gold standard' for practice, and help others to understand that REBT is the 'flag bearer' for emotive, cognitive, behavior therapy.

I encourage all members of AREBT to share their ideas for its growth with the committee. Please feel free to email me.



'The effects of Rational and Irrational beliefs in determining unhealthy anger and anger functional and dysfunctional inferences'

Christos Papalekas

In a test of one central feature of the Rational Emotive Behaviour Therapy ("REBT") within the context of unhealthy anger, that the nature of beliefs people hold about an aversive situation affect the emotions and the inferences they make about the situation, causal relationship between beliefs (irrational & rational) and unhealthy anger and inferences of unhealthy anger were experimentally investigated in a sample of 60 non-clinical participants, using the scenario based method and by utilizing a 2*2 mixed factorial design. Participants with irrational beliefs indicated more unhealthy anger as it was hypothesised. Moreover, the irrational group resulted in a higher dysfunctional inferences rating than the rational group, thus confirming the hypotheses. However, following the Analysis of Covariance, the overall results between pre and post anger were not significant; therefore, the outcome of the study doesn't support the hypothesis that beliefs determine the unhealthy anger independent of the ability of the participants to imagine themselves in the scenario; whereas the inferences results remained significant. The findings support the REBT theory in terms of how beliefs influence inferences and at the same time indicate the need for further investigation on how the effect of beliefs on emotions can be measured, taking into account the ability of the participants to adopt the belief.

Key Words: Psychopathology, Research, Anger, Irrationality, Inferences, Beliefs

1. Introduction

Anger - Theoretical Background

Anger is one of the most powerful emotions, if we consider its profound impact on social relations as well as effects on the person experiencing this emotion. Aristotle's approach to anger pointed the way to a modern, folk-centered, cognitive-motivational-relational theory of emotion. He writes in the Rhetoric: "Anger may be defined as a belief that we, or our friends, have been unfairly slighted, which causes in us both painful feelings and a desire or impulse for revenge" (Lazarus, 1991).

During the 1950s and 1960s, aggression was considered the response to the frustration or thwarting of a goal attainment, with anger being viewed as the motivator (drive) of aggression. It was mainly aggression rather than anger that was studied in those days (Lazarus, 1991).

It was not until the latter half of the twentieth century that anger was subjected to rigorous scientific appraisal. This had largely been led by the work of Novaco (1993) and Spielberger (1991). Novaco (1993) provided the theoretical foundation upon which to base the treatment of anger. Novaco (1993) describes three components of anger: cognitions, physiological arousal and behavioural reactions. Moreover, Spielberg has distinguished state and trait anger; the distinction reflecting the understanding that anger is both an emotional state varying across time, situation and intensity as well as a stable personality trait. (*in Suter, J., & Colleagues, 2002*)

According to Novaco (1994): "Anger is a negatively toned emotion, subjectively experienced as an aroused state of antagonism towards someone or something perceived to be a source of an aversive event".

The treatment of anger is a challenging clinical practise. Anger serves as the guardian to self-esteem, operates as a means of communicating negative sentiment, potentiates the abil-

ity to redress, grievances and boosts determination to overcome obstacles to our happiness and aspirations (Novaco & Jarvis, 2002).

According to Travis (1989), anger restores the sense of dignity and fair play (“I told that crook off the good”), it feels ambition and competitiveness (“I’ll show the bastard how the job is done”), it asserts the individual in an anonymous world (“Listen to me”).

Regarding the behavioural aspects of anger, according to Bandura (*in Berkowitz*, 1993) people who have experienced violence in their families during their upbringing are more likely to become aggressive towards their spouses and children. This is due to the fact that, watching numerous aggressive behaviours, they progressively become indifferent to violence; they do not perceive it as an especially bad behaviour to promote their interests.

It is stated that conflicts may arise in all types of relationships. The person has the ability to perceive situations on his own perspective according to which he can or cannot react with anger. From what has been written so far, it is argued that anger can be associated with various feelings (i.e. hurt) and behaviours and is an egocentric combination of thoughts and memories that emerge at the time and contribute in each individual’s state of anger.

However, there are differences in the way anger is expressed. According to psychologist Mary Kay Biaggio, men tend to get angry, women tend to feel hurt. Women are also more likely than men to blame themselves instead of the other person and to feel ambivalent about expressing anger (even when they do) (Tavris, 1989).

Based on McCulloch, Chief executive of the Mental Health Foundation’s (“MHF”), the Boiling point report on problem of anger in the UK declares: 28% of people worry about how angry they felt at the moment, 12% of people reported having trouble controlling their anger and 58% of people would not know where to seek help for managing their anger (*In Psychologist*, 2008).

1.2 REBT Theory and Anger

In recent years, Lazarus (1995) states that appraisal is a necessary condition of emotion. Meaning is said to underlie all emotions and is automatically available in every transaction with the environment.

Rational Emotive Behaviour Therapy proposes that emotional disturbance is the product of evaluative cognitions (i.e. beliefs) about the self, others or life/situations which are rigid, absolute or dogmatic in nature and take the form of “musts”, “shoulds”, “oughts” (Ellis, 1994).

REBT makes an important distinction between two types of negative emotions: constructive negative emotions and unconstructive negative emotions. These two types of emotions differ in one important respect: constructive negative emotions stem from rational beliefs; whereas unconstructive negative emotions stem from irrational beliefs (Dryden, 2000). It is argued that beliefs are associated in deeper level of appraisal in any emotion, something which is similar to what Lazarus (1995) mentioned about the appraisal as a condition of the emotion.

Additionally, Dryden and Yankura (1992) make a distinction between annoyance and anger. During a session, the therapist says: “I see annoyance resulting from really not liking what a person says- but anger is blaming the person, in addition to not liking what they say.”

Anger can lead to damnation of self, others or the world. Behavioural responses can be retaliatory: overly physical and/or verbal; indirectly through passive-aggressiveness (Dryden & Neenan, 1995). Furthermore, anger can take many forms.

The damning anger, which is a typical pattern of anger that arises when the individual infers that some important goal has been frustrated. The angry hurt which arises when a person infers that he or she has been treated unfairly and badly by significant others. And the

Dryden (1995a) maintains that the emotional reaction to an event has accompanying cognitive consequences, which can also be considered as inferential reactions. Specifically, he notes that a person holding an irrational belief about an aversive situation is responding to it with the formation of inferences and action tendencies that tend to prevent goal attainment. Dryden (2000) states that inferences are consequence of beliefs and are people's hypotheses, or conclusions about events.

Moreover, according to Bond (1995) firstly, inferences can be a consequence of beliefs and secondly, inferences can trigger beliefs. Whilst REBT states that evaluative inferences serve as activating events, it does not describe what kinds of inferences act as consequences of B's; It does not mention for example, if inferential C's can be both evaluative and non-evaluative, as inferences can be when they relate to A's.

It is thought however, that most inferential C's are evaluative inferences; that is, they relate to a person's goals (Bond, 1995). However, Ellis (1979) states that inferences that are relevant to people's goals, and thus become A's, are called evaluative inferences. In addition, inferences that are not relevant to people's goals and thus do not become A's, are called non-evaluative inferences.

Both of them said that inferences that are related to people's goals are evaluative. Therefore, the point is which of the inferential Cs are relevant to people's goals and thus can become a critical A (evaluative inferences) or not. According to Bond (1995) most inferential C's are evaluative inferences and thus become A's. However, whether inferences at C can be evaluative or not is beyond the scope of the present study.

Empirical research

The emotion of anger has been sadly neglected for some time. Di Giuseppe and colleagues (DiGiuseppe, Tafrate & Echard, 1994) called anger the 'forgotten emotion' as subject had aroused relatively little research interest until then. Howells (1998) states that the interrelated problems of anger, aggression and violence are still neglected areas within cognitive behavioural therapy. Based on the literature review, most studies conducted for anger are signals of correlation between beliefs and anger.

One correlation study conducted by Martin and Dahlen (2004) in a non-clinical population, explored potential interrelationships of irrational beliefs and the experience and expression of anger. Another correlation study was conducted by DiGiuseppe and Froh (2002), where they suggested that when people from clinical and non-clinical samples experience anger the cognition that they endorse the most are thoughts about revenge. Previous research has found significant moderate overlap between self-reported anger and irrational belief endorsement among several subjects groups.

Tafrate and Kassinove (1998) conducted an experimental design among participants who were experiencing problems with anger control. They were based on the four beliefs of REBT as postulated by Ellis. Awfulising, Low frustration tolerance, demandingness and global self/other ratings. Their findings support the REBT theory that men in the rational self-statement condition did report that they were less likely to express their anger outwardly and anger reduction was achieved.

Moreover, the central REBT hypothesis that the beliefs affect the inferences that accompanying the emotional experiences has been supported through lots of researches. Previous experimental research into emotion pairs has supported the hypothesis that irrational beliefs lead to more unconstructive inferences than rational beliefs.

In one experiment, in each case (subjects with rational beliefs and subjects with irrational beliefs), subjects holding an irrational belief made more negative inferences about seeing a

self-defensive or ego defensive anger you might experience in an encounter where you infer that the actions or responses of another person threaten your 'self-esteem' (Dryden & Gordon, 1990).

REBT put forward eight major unhealthy emotions and their healthy counterparts. Rational Emotive behaviour therapy's theory of negative emotions posits qualitative rather than quantitative differences between healthy and unhealthy negative emotions. For each of these, the inference (the A) is predicted to contain a theme.

For example, for unhealthy anger, one of the themes of the inference is that the individual infers that another person or he transgresses his personal rule. This theme remains the same both for unhealthy and healthy anger. The premise here is that it would be the nature of the belief (i.e. rational or irrational belief) that the individual would hold about this inference, which would decide the consequent emotional experience (Dryden, 2002).

Common personal rules that an individual might hold would be that he should be treated politely, reasonable, with fairness, consideration and respect. If the person strongly believes that he must always be treated in this way, he is likely to be very angry when people treat him rudely and unfairly (Trower, Casey & Dryden, 1988).

Something which is comparable (since what the person believes depends on him/her) to what Ellis (*in Overholser, 2003*) said that people are born with a tendency to easily upset themselves, and also to un-upset themselves, to reconstruct as well as construct their disturbances.

The REBT view of Anger is that person's irrational beliefs is about the real or inferred level of frustration encountered. The irrational belief that generates the anger will also generate cognitive consequences (i.e. inferences about the frustration encountered) and action tendencies (courses of action that are more likely to happen) (Dryden, 2000).

Furthermore, REBT theory states that there are two types of emotional or psychological disturbance; ego and discomfort disturbance (Dryden & Neenan, 2000). For example, a person makes himself unhealthily angry if he holds irrational beliefs about how he views himself (i.e. I am useless) which is related with unhealthy ego anger.

On the other hand, if a person infers (critical A) for example that he is frustrated and he holds irrational beliefs about his inference (i.e. this must not happen), his anger it is more likely to be directed outwardly, which is more associated with unhealthy discomfort anger (i.e. I can't stand it).

1.3 The role of beliefs on inferences

Dryden (2000) regards a statement that goes beyond the data at hand as an interpretation when it is not personally significant, whereas an inference is a statement that goes beyond the data at hand and is of personal significance. On the other hand, beliefs contain precise evaluative information to constitute a belief (Dryden, 2000).

It is a fundamental assumption of RET that inferential distortions stem from people's irrational beliefs (Ellis, 1979) Previous research (Dryden, Ferguson and Clark (1989) & Dryden, Ferguson & Mc Teague, 1989) demonstrated that people holding irrational beliefs form significantly more dysfunctional inferences than people holding rational beliefs.

REBT Theory states that humans do not just passively describe what they perceive in order to make sense of the world around them: they form interpretations and inferences about events that go beyond the data actually available to the person (Dryden, 1995). As Dryden (2002) states: "...However, the beliefs that a person holds can influence the subsequent inferences that he makes at C. Remember that C can stand for thinking consequences of beliefs as well as emotional and behavioural consequences of beliefs."

spider than those holding an irrational belief (Dryden, Ferguson & Mc Teague 1989).

Furthermore, in another experiment conducted by Dryden, Ferguson and Clark (1989), subjects were asked to imagine that they were going to present an academic seminar, adhered to a rational or an irrational belief. The results supported the hypothesis that one is holding an irrational belief leads to more negative inferences than holding to a rational belief; Finally, Mc Duff & Dryden (1998) investigating the effects of rational, irrational and indifference beliefs on inferences using a shame/disappointment scenario found that irrational group formed significantly more dysfunctional inferences than the rational group.

Finally, another research by Bond and Dryden (1996) has demonstrated that subjects who had an irrational belief created inferences that were more dysfunctional than those produced by subjects who had rational belief; and this finding held even when the beliefs referred to the self in a personal context (it is argued that this is similar to the experiment with the spider - Dryden, Ferguson & Mc Teague 1989) or a social context or to others in a social context; which is represented by the experiment with the presentation in a tutorial group who Dryden, Ferguson and Clark (1989) performed.

1.5 Problems with previous research

Kassinove (1995) emphasises the lack of a successful definition of anger. Moreover, DiGiuseppe and Tafrate (2007) state that understanding anger (or more often its outward expression in aggression) is usually seen from a criminal justice perspective. Between 1971 – 2005, the treatment studies were mainly depression (6356) and anxiety (2516) with anger coming last only with 185 studies.

It is obvious that the above suggest that anger was rarely examined outside the criminal perspective and the fact that in treatment studies anger is far behind that of depression and anxiety gives little optimism for the future research of anger either in the treatment area or outside the criminal perspective.

Ellis's 'primacy of Musts' hypothesis states that of the four irrational beliefs proposed by REBT theory, (musts, awfulising, Low frustration tolerance and evaluations of worth), it is the "must" beliefs that are at the very core of psychological disturbance (Ellis, 1994).

However, Bond and Dryden (1996a) argue that if cognitions (which include irrational beliefs) are parts of an interdependent system that determines psychological function, then how can irrational beliefs be isolated and their effects on psychological function be measured. Even Burgess's (1990) attempt to test the 'primacy of musts' hypothesis by developing the Attitudes and Beliefs Inventory (ABI) was unsuccessful, but still valid for research purposes.

Likewise, an additional problem, is also measuring the 'musts' independent of the secondary irrational beliefs. This prevents research findings to attribute the results to cause and effect relationships between 'musts' and their effect to psychological function; thus, the research about the effectiveness of the REBT therapy is prohibited. This is considered a difficulty, since 'musts' hypothesis is central in REBT. There is no research about anger which has tested merely the cause and effect relationship between 'musts' and psychological disturbance.

Tafrate (1995) states that there are no research papers published on the effectiveness of REBT and anger problems. DiGiuseppe & Froh (2002) mention that there are no current cognitive models of anger or cognitive-behavioural therapies which include anger as a central construct.

It is argued that lack of literature concerning anger problems is associated partially with the fact that there is no classification for anger problems in DSM-IV – Fourth Edition (American Psychiatric Association 2000). There is a tendency for research grants to be spent on classi-

fied disorders. According to McCulloch - the Mental Health Foundation (MHF): "Problem anger should not be tackled only as a subset of depression and anxiety" (*In psychologist*, 2008). It is argued that is the lack of declaration in theoretical debates (i.e. primacy of musts, complexity of anger as an emotion) which probably accounts for the existence of many correlation studies and practical issues (i.e. lack of anger classification in DSM – IV and lack of treatment studies) were problems with previous research.

1.6 The present study

The present study acknowledges the above research restrictions of the REBT theory. It is argued that the correlation studies that had taken place so far (i.e. Martin and Dahlen, 2004) exclude any conclusion about causal relationship between irrational beliefs and the emotion of anger.

Based on the literature reviewed, there was no research undertaken to support the effects of the irrational and rational beliefs on the emotion of the unhealthy anger and inferences of the unhealthy anger. The tradition of the REBT research so far, seems to be focused in an attempt to find the roots of the psychological disturbance and eventually to support more the REBT theory.

Hopefully, this study will add to the research field of REBT. In line with previous research, this study attempts to look into the main REBT hypothesis that rational beliefs lead to functional inferences and healthy negative emotions and irrational beliefs lead to dysfunctional inferences and unhealthy negative emotions. However, this study also focuses on inferences on the emotion of unhealthy anger as well as on inferences of unhealthy anger.

This study however, due to lack of devices to measure healthy anger as such, it will look upon, the lower unhealthy anger as closer related to healthy anger, since based on the scale of the questionnaire used to measure anger, low unhealthy anger is regarded much more functional than high unhealthy anger. (See Method).

Anger is an emotion that can be interrelated with many conditions (i.e. damning anger) and other emotions (i.e. hurt, jealousy) and thus is central most of our everyday experiences. This study would like to contribute on how REBT can contribute to a better understanding of the emotion of anger.

The experimental hypotheses were four:

H1: It is expected that participants who hold rational belief will rate unhealthy post anger lower than the participants holding irrational belief.

H2: It is also expected that participants who hold irrational belief will rate unhealthy post anger higher that the participants holding rational belief.

H3: It is anticipated that participants who hold a rational belief will rate functional inferences higher that those holding irrational belief.

H4: It is also anticipated that participants who hold an irrational belief will rate dysfunctional inferences higher that those holding rational belief.

2. Method

2.1 Design

A 2*2 factorial design was used. The independent variable was the beliefs about the situation (with two levels: rational and irrational), which was a between subject variable, which means that each group of subjects was given only one belief to hold; either rational or irrational. There were two dependent variables; the anger (with two levels: pre and post anger)

and the inferences (with two levels: functional and dysfunctional). Both dependent variables were within subjects, since all participants were presented with all categories of anger and inferences.

The covariate variable was the manipulation check employed to measure the participants' ability to imagine themselves in the situation while holding the belief with which they were presented. The ability of the participants to imagine themselves in the situation was included in the analysis (ANCOVA) in order to avoid excluding the participants that could not imagine themselves and consequently lose data.

2.2 Participants

A sample of 60 participants was recruited. They were drawn after permission had been obtained from the Psychology Department of the American College of Athens (Greece). The subjects were 43 female and 17 male final year Psychology students between the ages of 20 and 35 years ($M=24.7$ years). As it is seen above, females preoccupied the psychology department.

It was decided that participants wouldn't be excluded based on the manipulation check, because otherwise significant data might be excluded which could highlight the difference between rational and irrational beliefs and subsequently influence the results. None of the participants was selected to participate in this experiment, if they, when queried were self-identified as having emotional problems or feeling anger before the experiment. Participants received no payments of any kind.

2.3 Materials

Scenario

A scenario was created portraying a potentially anger provoking situation. The participants were asked to imagine that they have been waiting at the baker's and someone jumps the queue. (See Appendix 1). It was chosen a stranger to be included in the scenario rather than a friend because according to Ellis and Tafrate (1997) we more commonly make ourselves angry at individuals we know well.

The most frequent targets of anger include spouses, children, co-workers and friends. However, according to Lazarus (1991) "there are some persons that we don't want to be angry at because of the power they hold over us, whether this power is willingly granted or not".

Side with Ellis's and Tafrate's theory, a stranger was chosen for the scenario rather than an individual who is familiar in order to avoid any interpersonal dynamics that might currently exist between the subject and any imagined familiar person and thus influence the internal validity of the study.

The target of this study was to test the influence of the beliefs on the emotions and inferences rather than the influence of the personal dynamics to the emotions and inferences. Moreover, during the design of the scenario, cultural parameters were taken into consideration and it was concluded that the particular scenario would provoke anger within the social context of the Greek society.

It was also included in the scenario two of the basic themes of unhealthy anger based on REBT theory and clinical practise, that other transgresses personal rules and frustration (Dryden, 2002). Frustration is also in line with Stearns (1972) who wrote that frustration is a frequent component of anger response which is clearly demonstrated in the waiting situation.

According to Dryden (1990), "damning anger" arises when the individual infers that some

important goal has been frustrated, and/or that some person or institution has broken a personal rule of behaviour deemed to be important in the individual's personal domain. It is mentioned that the scenario given to the participants involved both a waiting situation (queuing) as well as a clear obstruction to a goal (shopping).

Beliefs

The independent variable was obtainable by two sets of beliefs: a rational and an irrational one. Both referring to the content of others transgresses my personal rules and frustration. (See Appendix 2)

The beliefs contain the demand/preference and the other depreciation/ other acceptance belief. Ellis (1977) argues in line with appraisal theory that beliefs where other people are evaluated negatively are likely to be predominant in individuals with anger disorders.

Moreover, according to Bond (1995) in order to affect the helpfulness of inferences, rational and irrational beliefs cannot just refer to preferences and demands; they also need to refer to their secondary beliefs contents. It has been established in REBT that rational and irrational beliefs lead respectively to functional and dysfunctional inferences and emotions. (Bond & Dryden 2000).

Previous findings do not support the REBT proposition that primary beliefs (i.e. demand and preferences) constitute the principal mechanism through which REBT beliefs affect the functionality of inferences. Rather, they appear to support the contention that secondary belief contents constitute this key mechanism (Bond & Dryden 2000). Thus, apart from the primary "Must" secondary beliefs (others depreciation/acceptance) were attached to both the rational and irrational beliefs of this experiment. (Appendix 2)

Dependent Measures

Two scales were developed for the measurement of the dependent variables. The Inference Scale and the State Trait Anger Expression Inventory (STAXI: Spielberger, 1991). The Inference Scale was consisted of 5 functional/healthy (items 2,4,6,8,10) inferences and 5 dysfunctional/unhealthy (items 1,3,5,7,9) inferences in a structured order (Appendix 3).

The Inference Scale was created in order to portray all of the 5 cognitive consequences (inferences at C) of the unhealthy anger and all of the 5 cognitive consequences of the healthy anger, based on Dryden's Diagrammatic summary of the major distinctions between healthy and unhealthy emotions (Dryden, 2002). For example, based on the Dryden's diagram, one of the cognitive consequences of anger is "plots to exact revenge". (Inference scale: item 7 – Appendix 3).

Furthermore, a research by DiGiuseppe and Froh (2002) confirmed the above. Their research suggests that when people from clinical and non-clinical samples experience anger, the cognition that they endorsed the most were thoughts about revenge. Participants' responses were recorded on a 9-point Likert type scale where "1" presented the reply not at all and "9" a lot.

The STAXI questionnaire was obtained from the Psychology department of Goldsmith's College – University of London. It wasn't translated into Greek since the American College is English spoken. The expression "I am burned up" was clarified. Besides Tavris (1989) states that metaphors of anger ("hot under the collar", "all steamed up", "he blew his stack") are common in other languages and cultures.

STAXI is a self-report questionnaire that provides data pertaining to the expression, experience and control of anger. It comprises 10 items summarising state anger, 10 items summa-

rising trait anger and 24 items that consider the nature and direction of anger expression, control and experience (Jones & Trower, 2004).

The State anger, which is a 10-item scale, measures the intensity of angry feelings at a particular time (emotional state varying across time, situation and intensity) (Suter, J., & Colleagues, 2002). This is the scale used in this experiment.

The first ten questions (How you feel right now) served as a pre-test of state Anger. As a post-test of state Anger, the same questions of the pre-test were used but it was decided to change slightly the question into "How you would feel", given certain directions to answer the questions in order to indicate how the participants would feel being in the given scenario whilst holding the belief specified to them.

From the 10 questions included in this post-test STAXI questionnaire, they were scored only the questions relevant to an emotional state (items: 1, 2, 3, 6, 9). All the answers were recorded in a 4-point Likert type scale and were measured in aggregation. It was decided that Numbers 1 and 2 of the answers to be measured to indicate low unhealthy anger and numbers 3 and 4 was decided to indicate high unhealthy anger.

The reason for that was that the items relevant to the emotional state are regarded representative of the unhealthy anger rather than the healthy anger. STAXI questionnaire does not reflect healthy anger, something that influenced the formation of the first and the second hypotheses. In addition, there was no division scale in STAXI of unhealthy vs. healthy anger as known in the REBT.

The rest of the items were not scored in the analysis because they were seen as describing action tendencies (how they express anger) of unhealthy anger, which are unrelated with how the participants experience anger emotionally, which is what the post- test of anger questionnaire tests. According to Dryden and Ellis (1987) action tendencies are, as the name implies, tendencies which individuals do not have to act, noted that these tendencies "can be seen as general categories...rather than specific responses".

Finally, the manipulation check (Appendix 4) served as a covariate variable, which means that the ability of the participants to imagine themselves in the scenario they were given while holding the belief assigned was included in the statistical analysis.

2.4 Procedure

Prior to the experiment taking place, a consent form was given to each participant. The experimenter was using English to the subjects, throughout the study. Any clarifications that had to be made on the experimenter's behalf were in English. All the participants were told that they would not be placed in an actual stressful situation, but they would have to imagine themselves in one. They were also asked whether they were under any distress and they were given the option to leave the room. No participant reported any emotional distress nor was any identified from the experimenter or by completing the STAXI questionnaire as feeling angry prior to the experiment or having emotional problems.

People who agreed to participate were informed by the experimenter: "Thank you so much for agreeing to help me with my research. Research wouldn't be possible without volunteers like you. Please write your names in all the questionnaires that you will be given, otherwise, it won't be possible to analyse the data". Then they were given the pre-test STAXI questionnaire and it was stressed to them to read the instructions and to indicate, "How they feel right now". The experimenter told them that they could ask questions for any clarifications.

Next, participants were randomly allocated to the experimental conditions. One group was informed that they are the group A (rational belief) and the other group was informed that they are the group B (irrational belief). Subjects were given the scenario. The experimenter

also read the instruction aloud: "I would like to read to you carefully the following scenario and for you try to imagine as vividly as possible, being in the situation."

Next they were given a printed copy of the belief based on the condition to which they were randomly assigned (Appendix 2). A sign on the wall stated: "Remember to hold your given belief. Thank you!" The experimenter read the instructions aloud: "I want you to imagine yourself in the situation I've just given you, whilst holding the following belief. It's very important that you use the belief I give you rather than your usual belief." After the above instruction was stressed, a minute or two was given to them to imagine themselves holding the belief assigned being in the scenario and to repeat quietly to themselves their belief and the scenario.

At this point, a manipulation check (Appendix 4) was introduced, in order to confirm that the manipulation of the independent variable was successful. This asked the participants to indicate how much they agreed with the statement "I can picture myself in that situation whilst holding that belief", by circling a number from one to nine, where one was "not at all" and 9 was "totally".

As they were 60 participants, the experimenter didn't have the time to check the manipulation checks on the spot. The participants were then given the post - test STAXI questionnaire. Again, it was stressed to them the importance of answering all the questions by imagining "How they would feel" if they were in the scenario whilst holding the belief assigned.

Next, the participants were given the inference scale in which they were asked to indicate their agreement with the presented statements. (Appendix 3) by circling in a 9-point scale a number from 1 (not at all) to 9 (a lot); the experimenter aloud stressed the importance of completing the scale whilst holding their belief and imagining themselves to the situation they read. Finally, each participant was debriefed verbally and this was also given to them in writing.

3. Results

3.1 Mean ratings

By the mean ratings of the unhealthy anger across conditions it is apparent that the group holding a rational belief scored higher on unhealthy pre anger ($M= 8.1111$, $SD= 3.98$). The group holding the irrational belief scored lower on unhealthy pre anger ($M=7.350$, $SD=1.30$). The highest mean scores for unhealthy post anger were obtained by the group holding the irrational belief ($M=14.6250$, $SD=2.26$) whereas the group holding the rational belief had lower mean ($M=10.8889$, $SD=4.19$). (Table1). Means indicated slight increase in unhealthy post anger by the group holding the rational belief but much greater increase in unhealthy post anger by the group holding the irrational belief.

By the mean ratings of inferences across conditions it can be seen that the group holding rational belief scored higher on healthy/functional inferences ($M=29.000$, $SD=5.04$). The lower mean scores were obtained by the group holding the irrational belief ($M=28.5000$, $SD=7.09$). The highest mean scores for unhealthy/dysfunctional inferences were obtained by the group holding the irrational belief ($M=31.5000$, $SD=9.03$). The lower mean scores were obtained by the group holding the rational belief ($M=26.8889$, $SD=6.71$) (Table 2). Means indicated that the group holding the rational belief scored higher on the healthy inferences rather than the group holding the irrational belief, which scored higher on the unhealthy inferences.

Table 1. Mean ratings of unhealthy anger across conditions

Descriptive Statistics

	Rational	Male/Female	Mean	Std. Deviation	N
UPREANG	Rational Beliefs	Male	8.1111	3.98260	9
		Female	8.0952	3.30007	21
		Total	8.1000	3.44764	30
	Irrational Beliefs	Male	7.3750	1.30247	8
		Female	8.0000	3.00793	22
		Total	7.8333	2.65334	30
	Total	Male	7.7647	2.96920	17
		Female	8.0465	3.11642	43
		Total	7.9667	3.05302	60
UPOSANG	Rational Beliefs	Male	10.8889	4.19656	9
		Female	10.6190	4.85259	21
		Total	10.7000	4.59497	30
	Irrational Beliefs	Male	14.6250	2.26385	8
		Female	14.1818	4.24978	22
		Total	14.3000	3.78882	30
	Total	Male	12.6471	3.83962	17
		Female	12.4419	4.84671	43
		Total	12.5000	4.55289	60

Table 2. Mean ratings of inferences of unhealthy anger across conditions

Descriptive Statistics

	Rational	Male/Female	Mean	Std. Deviation	N
Unhealthy	Rational Beliefs	Male	26.8889	6.71648	9
		Female	25.0952	7.96809	21
		Total	25.6333	7.54519	30
	Irrational Beliefs	Male	31.5000	9.03960	8
		Female	31.6364	8.30115	22
		Total	31.6000	8.34431	30
	Total	Male	29.0588	7.99586	17
		Female	28.4419	8.69675	43
		Total	28.6167	8.44141	60
Healthy	Rational Beliefs	Male	29.0000	5.04975	9
		Female	32.4286	5.58186	21
		Total	31.4000	5.57457	30
	Irrational Beliefs	Male	28.5000	7.09124	8
		Female	26.8636	4.38933	22
		Total	27.3000	5.16053	30
	Total	Male	28.7647	5.90052	17
		Female	29.5814	5.69140	43
		Total	29.3500	5.71298	60

3.2 Main effects

The data obtained were subjected to a Repeated Measure Analysis of Variance (ANOVA) and to an Analysis of Covariance (ANCOVA) to test the main effects of beliefs on emotions and cognitions. Four analyses were used: ANOVA for unhealthy anger scores, ANCOVA for unhealthy anger scores, ANOVA for inferences scores and ANCOVA for inferences scores. In both ANCOVA analyses mentioned above, the manipulation check served as a covariate variable.

Based on ANOVA for unhealthy anger scores results indicated statistically significant difference between pre and post anger [F (df 1, 56) = 54.693, $p < 0.05$]. There was a much greater increase on the unhealthy anger pre and post. (Table 3). The ratings are illustrated at the figure below (see figure 1) Moreover, results indicated that the interaction between beliefs and unhealthy anger was statistically significant [F (df 1, 56) = 10.302, $p < 0.05$] (Table 3). The statistical analysis showed that the type of beliefs participants held has a significant effect on the unhealthy anger.

It is clear from figure 1 that there was a much greater increase on the unhealthy anger (pre to post) for the group holding the irrational belief than the group holding the rational belief.

The first hypothesis stating that participants who hold rational belief will rate unhealthy post anger ($M=10.8889$) lower than the participants holding irrational belief ($M=14.6250$) is accepted. Moreover, the second hypothesis stating that participants who hold irrational belief will rate unhealthy post anger higher ($M=14.6250$) than the participants holding rational belief ($M= 10.8889$) is accepted. Irrational belief group displayed a tendency feeling angrier than the rational belief group after the anger-provoking scenario.

Regarding ANCOVA for unhealthy anger scores, it was used in order to include in the analysis the ability of the participants to imagine themselves in the scenario were given whilst holding the belief assigned. Based on the ANCOVA for unhealthy anger scores, results indicated that the interaction between beliefs and the unhealthy anger was statistically significant [F (df 1, 55) = 9.676, $< 0, 05$].

The difference between pre and post anger across the rational and the irrational group was significant. The mean ratings of the unhealthy anger across conditions were the same (Table 1).

However, following the ANCOVA for the unhealthy anger, results indicated that the pre and post anger scores overall were no longer significant. Following the above, It is apparent that including the ability of the participants to imagine (covariate), the pre-post anger overall became not significant but the pre-post anger interaction with the belief groups remained significant. The first and the second Hypotheses are rejected following ANCOVA analysis, as the pre post differences overall on unhealthy anger were no longer significant.

Moreover, based on ANOVA for inferences scores results indicated that the interaction between beliefs and the inferences was statistically significant. [F , (df 1, 56) = 10.477, $P < 0.005$] (Table 4) The statistical analysis revealed that the type of beliefs participants held has a significant effect on formation of helpful inferences. The ratings are illustrated at the figure below (see Figure 2)

Based on figure 2, it is illustrated that they were more healthy inferences in the rational belief group than unhealthy inferences. As it is shown, the irrational belief group scored higher unhealthy inferences than healthy inferences. Participants holding an irrational belief displayed a greater tendency to infer unhealthily than did those who hold a rational belief.

The third hypothesis predicted that participants who hold a rational belief would rate func-

Table 3. Anger – ANOVA

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
prepost	Sphericity Assumed	533.045	1	533.045	54.693	.000
	Greenhouse-Geisser	533.045	1.000	533.045	54.693	.000
	Huynh-Feldt	533.045	1.000	533.045	54.693	.000
	Lower-bound	533.045	1.000	533.045	54.693	.000
prepost * GROUP	Sphericity Assumed	100.401	1	100.401	10.302	.002
	Greenhouse-Geisser	100.401	1.000	100.401	10.302	.002
	Huynh-Feldt	100.401	1.000	100.401	10.302	.002
	Lower-bound	100.401	1.000	100.401	10.302	.002
prepost * SEX	Sphericity Assumed	2.655	1	2.655	.272	.604
	Greenhouse-Geisser	2.655	1.000	2.655	.272	.604
	Huynh-Feldt	2.655	1.000	2.655	.272	.604
	Lower-bound	2.655	1.000	2.655	.272	.604
prepost * GROUP * SE	Sphericity Assumed	1.007	1	1.007	.103	.749
	Greenhouse-Geisser	1.007	1.000	1.007	.103	.749
	Huynh-Feldt	1.007	1.000	1.007	.103	.749
	Lower-bound	1.007	1.000	1.007	.103	.749
Error(prepost)	Sphericity Assumed	545.783	56	9.746		
	Greenhouse-Geisser	545.783	56.000	9.746		
	Huynh-Feldt	545.783	56.000	9.746		
	Lower-bound	545.783	56.000	9.746		

Estimated Marginal Means of MEASURE_1

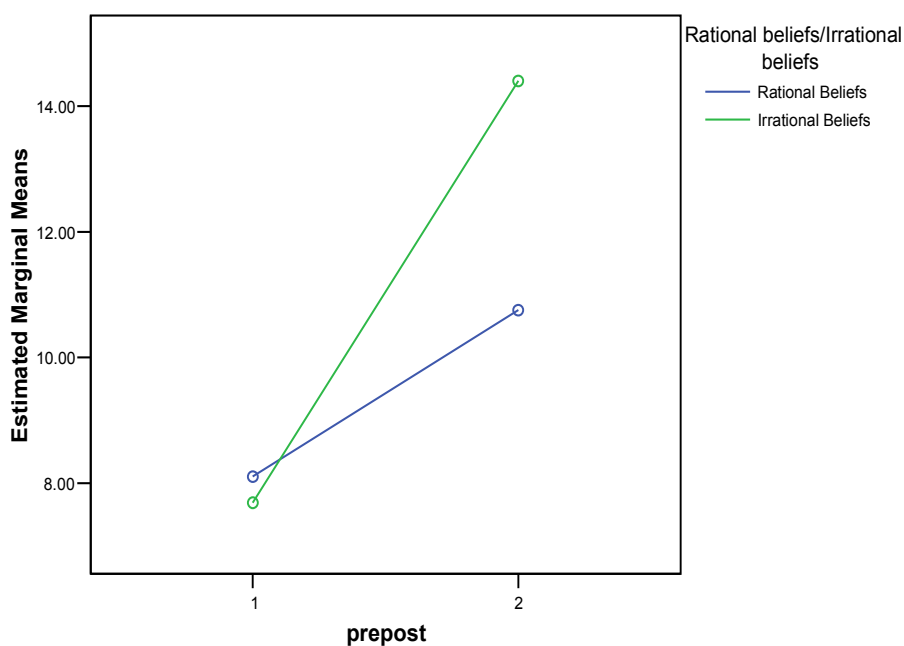


Figure 1. Mean ratings of unhealthy anger across Groups.

Table 4. Inferences – ANOVA

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
inferenc	Sphericity Assumed	4.245	1	4.245	.099	.754
	Greenhouse-Geisser	4.245	1.000	4.245	.099	.754
	Huynh-Feldt	4.245	1.000	4.245	.099	.754
	Lower-bound	4.245	1.000	4.245	.099	.754
inferenc * GROUP	Sphericity Assumed	450.250	1	450.250	10.477	.002
	Greenhouse-Geisser	450.250	1.000	450.250	10.477	.002
	Huynh-Feldt	450.250	1.000	450.250	10.477	.002
	Lower-bound	450.250	1.000	450.250	10.477	.002
inferenc * SEX	Sphericity Assumed	18.073	1	18.073	.421	.519
	Greenhouse-Geisser	18.073	1.000	18.073	.421	.519
	Huynh-Feldt	18.073	1.000	18.073	.421	.519
	Lower-bound	18.073	1.000	18.073	.421	.519
inferenc * GROUP * SEX	Sphericity Assumed	74.319	1	74.319	1.729	.194
	Greenhouse-Geisser	74.319	1.000	74.319	1.729	.194
	Huynh-Feldt	74.319	1.000	74.319	1.729	.194
	Lower-bound	74.319	1.000	74.319	1.729	.194
Error(inferenc)	Sphericity Assumed	2406.710	56	42.977		
	Greenhouse-Geisser	2406.710	56.000	42.977		
	Huynh-Feldt	2406.710	56.000	42.977		
	Lower-bound	2406.710	56.000	42.977		

Estimated Marginal Means of MEASURE_1

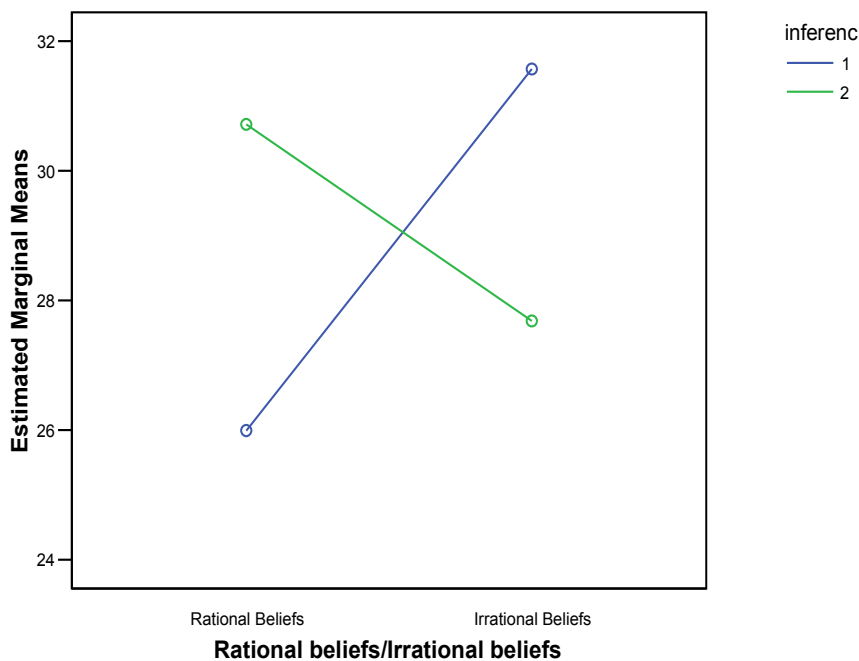


Figure 2. Mean ratings of inferences across Groups.

tional inferences higher than those holding irrational beliefs. The statistical analysis revealed that with respect to healthy/functional inferences, the rational belief group provided greater rating ($M=29.0000$) than those in the irrational group ($M=28.5000$) – (Table 2). Thus, the third hypothesis is accepted.

Moreover, the fourth hypothesis predicted that participants who hold an irrational belief would rate dysfunctional inferences higher than those holding rational belief. Again, the statistical analysis made known that with respect to the unhealthy/dysfunctional inferences, the irrational group provided greater rating ($M=31.5000$) than those in the rational group ($M=26.8889$) – (Table 2). Thus, the fourth hypothesis is accepted.

Regarding ANCOVA for inferences it was used in order to include in the analysis the ability of the participants to imagine themselves in the scenario were given whilst holding the belief assigned. (Manipulation check as a covariate).

The results pointed towards that the interaction between beliefs and inferences was statistically significant [F (df 1, 55) = 9.680, < 0.05]. Significant were also the inference scores overall with [F (df 1, 55) = 4.765, < 0.05]. Moreover, the results indicated that the interaction between inferences and the manipulation check was significant. [F (df 1, 55) = 4.808, < 0.05].

Following the ANCOVA for inferences, it can be said that since the scores of inferences overall and the scores of inferences across the conditions were significant the third and the fourth hypotheses are accepted.

Finally, there were no main effects for sex of subjects neither for anger nor for inferences. As a result, any presumption about women being angrier or more cognitively distorted about anger provoking scenario cannot be made.

4. DISCUSSION

The present study examined the impact of beliefs on inferences and emotions. In general, the findings of the study suggest that beliefs people hold influence the functionality of the inferences. The statistical analysis indicated that beliefs have a significant effect on the functionality of inferences.

It could be said that an internal event (beliefs) influences another internal event (inferences). In terms of the beliefs–emotions relationship, it has confirmed what Ellis (2004) said that : “thinking and emoting usually accompany each other, act in a circular cause – and –effect relationship, and in certain (though hardly all) respects are intrinsically connected”.

Following the ANOVA analysis, regarding the first hypothesis and in line with the REBT theory, it was found that the rational beliefs lead to a slight increase of unhealthy post anger but not as with the irrational beliefs. In a few words, the participants assigned the rational belief scored lower on unhealthy post anger, than the participants who were assigned the irrational belief. As predicted by the second hypothesis, participants given an irrational belief provided higher scores on unhealthy anger. In line with the REBT theory, rational beliefs lead to greater emotional functionality (healthier) than irrational beliefs.

It was assumed that somebody scoring low on unhealthy anger would reflect better functionality on inferences and emotions than somebody scoring higher.

Moreover, it wouldn't be realistic to hypothesise that the rational belief group would give the same score or somewhat same score on pre and post unhealthy anger; Firstly because the A (scenario) could partially generate emotional experience (unhealthy anger) in interaction with beliefs (Ellis, 1994); and secondly because the participants might be guessing (see below) or wanting to please the experimenter and consequently score higher post test.

At this point, it is stated that there is a lack of devices to differentiate the qualitative distinc-

tion of emotions in REBT. There are other variables which have to be taken into account in order to draw a conclusion that it was the belief that cause the emotional response to STAXI. ANCOVA was used in order not to lose subjects from the analysis. Since subjects who would circle less than seven would be excluded from the study. Moreover, the results indicated that when the ability of the participants to imagine (themselves in the scenario whilst holding the belief assigned) was included in the analysis, the pre and post anger scores were no longer significant.

It is obvious that the difference between unhealthy anger pre and post overall was disappeared in ANCOVA. Consequently, the difference between pre and post anger was not statistically significant, therefore, the effects of beliefs in determining the unhealthy anger taking into account the ability of the participants to imagine were no longer significant, thus the first and the second hypotheses are rejected. However, unhealthy anger pre and post across the groups remained significant.

Self-report measures are vulnerable to distortions, because participants of study might choose to answer in a way that makes them look good on the test. In addition, they might wanted to please the experimenter, so they probably guess what the experimenter wanted in the study.

The participants were given the time to imagine themselves in the scenario whilst holding the belief assigned; consequently, probably because they had the time to think, they guess. Although the scenario allowed conditions of injustice, damning anger (frustration of goal) and self-defensive anger. (Dryden & Gordon, 1990), and although the experimenter tried to enhance their ability to hold the belief assigned, by putting a note on the wall, however, the subjects' own beliefs may interfere with the process of imagining.

Moreover, though it was included inflammatory thinking in the irrational belief (Novaco & Jarvis, 2002) (you did a bad think, you are a bad person – anger as a guardian to self - esteem) and although it was included in the scenario the trend of the individual to assert himself in an anonymous world (Tavris, 1989) (what gives him the right to break the rules?) which is the cognitive distortion that appears relevant to anger, probably the subjects they couldn't hold on to the irrational belief.

It is stated that this happened probably because the participants thought that they would be judged by the experimenter or they tried to second guess the purpose of the study.

Furthermore, the rational group formed significantly more functional inferences on the inference scale than the irrational group. Moreover, participants holding an irrational belief displayed a greater tendency to infer unhealthily than those who held a rational belief. Following the ANCOVA for inferences, the results remained significant, it was proven that rational beliefs lead to more healthy inferences than the irrational beliefs and that irrational beliefs lead to more unhealthy inferences than the rational group.

The analysis revealed that with respect to healthy/functional inferences, the rational belief group provided slightly greater rating than the irrational group. Even with a slight difference between rational and irrational group ratings to healthy inferences, there was sufficient evidence to support the REBT theory that rational beliefs lead to healthy inferences.

Thus, the third and the fourth hypotheses were confirmed, since this study supported the above hypotheses that holding irrational beliefs leads to more dysfunctional inferences than holding a rational belief. These findings are in line with previous findings (Dryden, Ferguson and Clark, 1989) & (Dryden, Ferguson & Mc Teague, 1989). They are also in line with REBT theory, that the beliefs that a person holds can influence the subsequent inferences that he makes. Irrational beliefs lead to dysfunctional consequences because they are rigid and demanding (Dryden, 1995).

This learning is in line with what Ellis (1994) argues as the fundamental assumption of REBT, is that it is the evaluations, not inferences that are causal in the manifestation and maintenance of emotional distress. Based on investigation of studies in this essay, there was evidence that beliefs are associated, or lead to emotions. Based on the results it was proven what Dryden (2000) said that constructive negative emotions stem from rational beliefs; whereas unconstructive negative emotions stem from irrational beliefs.

Even though, this study presented evidence, which supports the REBT predisposition, that beliefs (rational and irrational) lead to emotions (healthy and unhealthy), it cannot conclude absolutely that it is the primary or the secondary belief that caused emotions. According to Bond and Dryden (1996a), the core hypotheses of REBT are untestable.

At this point, it should be clarified that it sounds paradox for rational beliefs to lead to unhealthy anger; the reason for that was that the items of STAXI questionnaire were regarded as being representative of the unhealthy anger rather than the healthy anger. Thus, STAXI questionnaire doesn't measure healthy anger, as it is known in the REBT. It only measures emotional state of anger that is considered to be associated closer with unhealthy anger as it is known in REBT.

Therefore, it was decided to outline the first and the second hypotheses on the basis that rational belief will lead the participants to feel unhealthily angry but not as if, they were holding irrational beliefs. It wasn't decided to form the first and the second hypotheses on the basis that rational beliefs would lead to healthy anger, because STAXI questionnaire doesn't reflect healthy anger.

4.1 Limitations/omissions and potential solutions

It is argued that it is important to mention the drawbacks of not having a sufficient measure to rate healthy and unhealthy anger. REBT lacks devices that can accurately differentiate the qualitative distinction in unhealthy and healthy emotions. Anger was not an exception. If there was a device that could measure accurately healthy and unhealthy anger, then there would be a clear indication that rational beliefs lead to healthy anger (rather than low unhealthy anger), thus giving more validity to the experiment by emphasising the cause and effect of rational beliefs and healthy anger.

The number of tasks that the participants had to imagine and perform at the same time (imagining scenario and beliefs, read STAXI questions) could have interfered with their ability to experience the emotions that the scenario meant to provoke. Therefore, they could have guessed.

Moreover, the experimenter could encourage the individuals to repeat the belief assigned certain times before the completion of the post STAXI. Although the beliefs were short, the participants couldn't hold the beliefs vivid throughout the completion of the questionnaire. It is mentioned that if the experimenter had more subjects available for study, it would be inexpensive losing data from subjects; nevertheless, it is a general issue of REBT of how subjects could hold the beliefs that were asked to adopt, and how can be tested whether they can really imagine.

Bargh (1982) stated that people are more likely to respond to words, concepts and personal-ity dimensions that are used more frequently and therefore are more accessible to people's mind. In the study, demanding beliefs and preference beliefs were used in a common scenario in order to be accessible, but still was difficult for the participants to hold the beliefs. Even if demands were more accessible, it would not necessarily follow that they would be of primary importance in creating emotional disturbance.

In terms of the inferences, Dryden, Ferguson and Clark (1989) found that the “effort” variable led to subjects making more negative inferences than the “importance” variable both as a main effect and in interaction with the “belief” variable. Bond and Dryden (2000) indicated that contrary to the REBT theory, the rational and the irrational beliefs had a greater effect on the functionality of inferences, when they referred to contents.

Moreover, after Bond and Dryden (2000) enlarged for the benefit of the scientific field of the REBT the debate about the role of secondary beliefs to the functionality of inferences; it cannot be justified whether the introduction of more secondary beliefs or different contents of the beliefs would enhance the findings of this research.

From all the above, it could be extracted that beliefs sometimes exclusively or other times partially lead to inferences, since variables of the situation and the contents of the beliefs have their own role to play in terms of how they lead to functional and dysfunctional inferences. Thus, the findings of this study suggest the cause and effects relationship of beliefs and inferences cannot be generalised due to other variables mentioned above.

Furthermore, replicating the experiment using participants from another country would probably alter the variety of the results. The reason is that the anger provoking scenario designed to provoke anger took into account the cultural variables of the Greek society, but it could provoke less or more anger in another country.

However, there is no indication that results would be different since the experiment was not interested in the expression of emotion–action tendencies. The results cannot be generalised from undiagnosed students to clinical populations. A replication of the study with a clinical population and in other cultures would allow for more generalisations.

4.2 Conclusion

The experimenter was satisfied that although some of the results were not significant in analysis of covariance, it was proven that beliefs lead to the functionality of emotions and inferences and consequently provides some support for the REBT propositions. The present study assessed the impact of beliefs on emotions and inferences, providing a cause and effect relationship between them.

It is mentioned that beliefs, inferences, and emotions are internal events and that monitoring these events solely by quantitative methods (i.e. questionnaires) could not strengthen the external validity of the experiments. Cultural, gender, clinical conditions of the sample, experiment variables and emotional arousal state might get into the way of research. Probably both qualitative methods (i.e. interviews) and quantitative methods could contribute to assess the internal events more accurately. The use of technology would mediate the variables of the experiment processes in order to be avoided the disengagement of the subjects from the emotion.

The strength of the experiment is considered the fact that pre and post-unhealthy anger were tested across the conditions. Analysis of covariance enabled the experimenter to make a conclusion that there was no significance at pre and post anger, when in certainty (ANOVA) there was.

However, what appeared to happen was that subjects were able to imagine themselves but they were also guessing. Therefore, any future design needs to minimise number of variables people have to imagine in order not to interfere with the emotional experience. Because of the items, when they started reading they disengaged from the emotion of anger. A more technologically sophisticated way would save time exclude any variables of disengagement.

It is hoped that this study, offered a small contribution to how beliefs influence the function-

ality of emotions and inferences. It is argued that the term “lead” is a proper one, since one way or another (whether beliefs determine, influence, cause or contribute to A’s and C’s) beliefs have an imperative role to play on how inferences and emotions are structured.

The complexity of the interactions between beliefs and emotions and beliefs and inferences has implications both in the scientific as well as in the therapeutic field of REBT. According to Lazarus (1995) there is a vigorous argument among emotion theorists about how to understand cognition-emotion relationships. Are emotions and cognition best regarded as separate sets of processes or do they work as an organised unit? (Lazarus, 1995).

It is stated that in Line with the REBT, emotions always contain cognitions, probably they work more as an organised unit rather as separate processes, since when people change the way they think, their emotions change as well. This study provided some evidence for the above, regarding unhealthy anger.

Dryden and colleagues (Weinrach, DiGiuseppe, Wolfe, Ellis, Bernard, Kassinove, Morris & Vernon) (2006) predicting the status of the REBT in the future he writes: “REBT will fail to attract sufficient funds to test its efficacy under controlled and clinically relevant conditions, and its unique theoretical hypotheses (e.g. that irrational and rational beliefs underpin unhealthy and healthy negative emotions, respectively). As such, it will continue to be perceived as having poor empirical evidence.

Future studies should investigate the predictions of Ellis’ cognitive theory of emotion by taking into accounts specific emotions and specific types of beliefs and find the interactions between them. The primacy of musts, the importance of secondary beliefs in the functionality of inferences and the interdependence principle might need further elucidation. However, it is stated that none of the above principles has been proven false so far.

The results reported in this study contribute to REBT research in spite the limitations. However, an accurate test of REBT hypothesis regarding the relationship between beliefs and emotions and beliefs and inferences require more accurate assessment of inferences (not necessarily self-designed) and emotions when subjects actually adopt the rational and the irrational beliefs about the scenario assigned.

Thus, the findings of this study cannot be accepted without further investigation. Replication of this study by using improved self-report measures and devices to differentiate healthy and unhealthy anger, while using clinical population, is required to investigate further the effects of beliefs to emotions and inferences.

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6. APPENDICES

APPENDIX 1

THE SCENARIO

I would like to read **carefully** the following scenario and try to imagine as **vividly** as possible, being in the situation.

“Saturday morning you are shopping at the bakers and you are in a hurry. As usual at this time of day, it’s very busy. You have already been waiting for 15 minutes. Just when it’s your turn, someone else jumps the queue. You point out to him that he has pushed in front of you. You think to yourself that “all of us have queued and we are all in a hurry, what gives him the right to break the rules?”

APPENDIX 2

BELIEF “A” – (Rational Belief)

Name _____

I want you to **imagine** yourself in the situation I’ve just given you, while **holding** the following belief. It’s very important that you **use the belief I give you** rather than **your usual belief**.

“I would prefer if this guy didn’t jump the queue but it’s not essential. It’s bad behaviour on his part but it doesn’t make him a bad person. I can accept him as a fallible person who has strengths as well as weaknesses.”

BELIEF “B” - (Irrational Belief)

Name _____

I want you to **imagine** yourself in the situation I’ve just given you, while **holding** the following belief. It’s very important that you **use the belief I give you** rather than **your usual belief**.

“He absolutely shouldn’t jump the queue. He is a really bad person for jumping the queue.”

APPENDIX 3

Inferences Questionnaire

Condition _____

Name _____

Please indicate your agreement with the following statements by circling a number from 1 to 9 whilst (a) holding your belief and (b) imagining yourself in the situation you just read.

<i>I agree with the statement:</i>	1= not at all	5= a bit	9= a lot
1. <i>The other person jumped the queue on purpose</i>	1	2	3 4 5 6 7 8 9
2. <i>The other person jumped the queue because he was in a hurry</i>	1	2	3 4 5 6 7 8 9
3. <i>The other person jumped the queue in order to disrespect me</i>	1	2	3 4 5 6 7 8 9
4. <i>He had no intention to disrespect me</i>	1	2	3 4 5 6 7 8 9
5. <i>He shouldn't push in</i>	1	2	3 4 5 6 7 8 9
6. <i>He could have been more considerate</i>	1	2	3 4 5 6 7 8 9
7. <i>I hope he gets humiliated by the manager for jumping the queue</i>	1	2	3 4 5 6 7 8 9
8. <i>I hope he doesn't get humiliated by the manager for jumping the queue</i>	1	2	3 4 5 6 7 8 9

APPENDIX 4

Manipulation check

I can picture myself in that situation while holding that belief

Not at all

Tottaly

1 2 3 4 5 6 7 8 9

Condition_____

Name_____

Resilience

Michael Neenan

This review of resilience looks at how the scientific study of resilience developed, definitions of resilience are offered and several writers describe what, in their view, are the factors that constitute a resilient outlook. Issue is taken with the popular conception of resilience as bouncing back from adversity as this view doesn't reflect the multiple pathways that lead to resilience. Our belief systems are seen as the heart of resilience and unhelpful beliefs that undermine resilience building are discussed. Resilience is viewed as an ordinary, not extraordinary, capacity within the reach of all to develop. Finally, despite all the research that has been done, resilience in the face of adversity remains inadequately understood.

Key Words: *resilience, adversity, stress, mindset*

Introduction

The study of resilience started more by accident than design. Researchers studying children from at-risk backgrounds (e.g. economic hardship, parental mental illness, abuse and neglect) expected to find them all struggling unsuccessfully against the odds – the focus was on the inevitable pathology the children would experience; instead about one third of the children in each study made a positive adaptation to adversity and maintained this behaviour when followed-up (Grotberg, 1999). As Rutter (2000: 651) remarks:

It has been a universal finding [that] in all studies of risk experiences, there is enormous variation in children's responses ... Even with the most severe stressors and adversities, it is unusual for more than half of the children to develop significant psychopathology. For many years, this striking phenomenon received surprisingly little research attention.

Research attention on this subject began to increase in the 1980s when behavioural scientists, who had previously been interested in developmental psychopathology, shifted their focus to studying the protective factors that acted as a buffer against adversity for those high-risk children who had achieved good developmental outcomes (Werner and Smith, 2001). These protective factors, both internal and external, included having an engaging temperament that attracted adults and peers, good communication and problem-solving skills, positive self-concept, impulse control, supportive teachers, mentors (elders), competent peer friends, membership of prosocial organizations such as youth clubs or religious groups (Werner, 2005).

The concept of resilience has been criticized for the often vague and contradictory definitions that are advanced to explain it; these critics suggest that the concept may have outlived its usefulness (Kaplan, 2005). Despite this criticism, others contend that 'there is a growing consensus on a working vocabulary for [resilience researchers]:

Resilience – a pattern of positive adaptation in the context of past and present adversity

Adversity – environmental conditions that interfere with or threaten the accomplishment of age-appropriate developmental tasks' (O'Dougherty Wright and Masten, 2005: 18-19).

Turning my attention to adult resilience (I don't work with children or adolescents but the majority of resilience research is focused on them, hence my introductory comments), I'm not particularly keen on the popular definition of resilience as 'bouncing back from adversity' as it implies invulnerability to stressful times, constitutionally unbreakable. Bouncing back suggests that:

- Little effort was expended or any distress experienced. As Newman (2003: 234) states – 'The road to resilience is likely to involve considerable emotional distress [and struggle]'; so what kind of events are being labelled as 'adversities'? Sunday dinner with your cantankerous parents or losing a leg in a car crash?
- Little time is allowed for emotional processing of adverse events as this might be seen 'as not getting on with it'. Trying to suppress or avoid such processing indicates you haven't absorbed what's happened to you and this does not augur well for future successful coping when the next adversity strikes.
- One's behaviour never falters in the face of difficult times. Struggling back from adversity may be the more realistic response but dictionary definitions of resilience state you are able to 'recover quickly from difficult conditions' thereby reinforcing the bouncing back image. It can take some people a long time to overcome adversity: 'We have much to learn from once-fragmented Humpty Dumpties [who came from the worst childhood environments] who ten – or even forty – years later become whole' (Vaillant, 1993: 284).
- There's no change in your life or yourself; your struggle with adversity has made no impact. It's as if the person is a substance or object that is able to spring back to its original shape after being compressed or bent. A successful outcome of your struggle with adversity demonstrates personal growth, your view of yourself has changed for the better rather than your life reverting to its pre-adversity state as if nothing had happened (Neenan, 2009).

You either have resilience or you don't (early research on resilient children took this view) and the inability to bounce back from *every* difficulty means you're not really resilient. The accurate view is that when your resilience strengths are insufficient to cope with a current adversity, then additional skills and attitudes need to be developed.

Whether you are bouncing, coming or struggling back from tough times (a continuum of resilience) depends on the severity and duration of the adversity (or adversities) and what internal and external resources are available to you at any given point in time. As Werner (2005: 98) states: 'Large-scale longitudinal studies that have followed [children] from birth to adulthood ... have repeatedly found a shifting balance between stressful events that heighten children's vulnerability and protective factors that enhance their resilience'. This shifting balance may mean that at one point in your life having family and friends to lean on mitigated the impact of misfortune but at another, later point in your life such support is greatly reduced and you have to rely more on yourself to get through tough times which leads to a protracted and harder struggle. Resilience is not an individual trait (fixed characteristic): a resilient person does not cope well with all difficulties at all times (Masten and Powell, 2003) and therefore your degree of stress resistance varies over time and according to circumstances (Rutter, 2000).

One writer's conception of resilience includes falling apart in the face of significant stress (disruption) – 'In order to learn and to experience meaningful change, we must fall apart' (Flach: 2004: 17) – and then putting the pieces of ourselves and our worlds together again in new and more helpful ways (reintegration). Each period of disruption and reintegration is necessary to prepare us to meet future stresses and opportunities (Flach, 2004).

My own definition of resilience is: 'Responding adaptively to life's challenges and emerging from them psychologically stronger and more capable'. This definition emphasizes that it's not enough to survive tough times: constructive personal change should also have occurred. For example, a survivor and a person demonstrating a resilient response may not be undergoing the same process of recovery:

Survivors are not necessarily resilient; some become trapped in a position as victims, nursing their wounds and blocked from growth by anger and blame. In contrast, the qualities of resilience enable people to heal from painful wounds, take charge of their lives, and go on to live fully and love well (Walsh, 2006: 4-5).

Other views on resilience

Various writers and researchers offer their different views on this issue though there is often considerable overlap between them. Reivich and Shatté (2002) pinpoint seven key abilities or factors that appear to increase overall resilience:

1. Emotional regulation – staying calm under pressure.
2. Impulse control – not automatically giving in to sudden desires, pleasures or whims but, instead, considering the consequences of such behaviour.
3. Optimism – the belief that things can change for the better without being overly optimistic that nothing untoward will occur and thereby avoiding troubleshooting potential roadblocks to change.
4. Causal analysis – the ability to identify accurately the causes of one's problems by focusing on explanatory styles, e.g. 'I messed up on this occasion. I better put it right' vs 'I'm always messing up. Nothing I do will ever make any difference. The world's against me'. The first explanatory style focuses on taking responsibility and solving problems within a specific context while the second style takes a global, unchanging view of events – the self is helpless and life is without hope.
5. Empathy – the ability to read others' emotional states in order to improve work and personal relationships.
6. Self-efficacy – seeing oneself as an effective problem-solver.
7. Reaching out – life is not just about overcoming adversity but seeking out new opportunities, pleasures and challenges.

Maddi (Maddi, 2002; Maddi and Khoshaba, 2005) states that the key to resilience is hardiness: a combination of three attitudes (3Cs) to survive and thrive during stressful times.

These 3Cs are:

Commitment – staying involved with people and events instead of withdrawing from them

Control – trying to influence outcomes no matter how difficult this might be

Challenge – seeing change as a springboard for personal growth rather than always looking for comfort and security in life.

Flach (2004) sees resilient attributes as including a high level of personal discipline, wide range of interests, willingness to dream, open-mindedness and receptivity to new ideas, high tolerance of distress and a philosophical outlook which extracts meaning and hope from even the lowest and seemingly hopeless moments of one's life. Siebert (2005) avers that highly resilient individuals have, inter alia, many pairs of counterbalanced qualities such as being serious and playful, sensitive and tough, stable and unpredictable, hardworking and lazy, optimistic and pessimistic which increases their ability to cope with a broad range of situations: 'Successful people in every profession know that it is better to have many possible responses

than to be limited to a few' (Siebert, 2005: 130). Additionally, such individuals have the self-confidence not to allow themselves to be defined and confined by others' views or labels (e.g. 'I'm not a pessimist but sometimes it might be important to introduce a pessimistic tone into the discussion rather than trying to be relentlessly upbeat on every issue').

Having said all this, in providing resilience training it is important not to be prescriptive, i.e. you cannot be resilient unless you adopt *these* qualities, behaviours and attitudes. What works for one person may not for another; building an idiosyncratic resilience profile will depend on your individual strengths, styles and cultural differences (Newman, 2003). For example, when I'm facing serious difficulties I usually go out for a long walk or sit on the sofa for an hour or two to think things through whereas a colleague often seeks the support and advice of his friends to find a way out of his troubles. Two different styles of problem-solving reflecting our different temperaments. However, compulsive self-reliance or help-seeking would militate against developing the flexibility required for a resilient outlook.

The heart of resilience

'Our research has demonstrated that the number-one roadblock to resilience is not genetics, not childhood experiences, not a lack of opportunity or wealth. The principal obstacle to tapping into our inner strength lies with our cognitive [thinking] style ... ways of looking at the world and interpreting events that every one of us develops from childhood' (Reivich and Shatté, 2002: 11). Modern research confirms an ancient truth as stated by the Stoic philosopher and patron saint of the resilient, Epictetus: 'Remember this general truth, that it is we who squeeze ourselves, who put ourselves in difficulties. And, actually, it is our opinions that squeeze us and limit us' (quoted in Morris, 2004: 76). Many events happen in life that we have no control over but our opinions and beliefs about these events are within our control and can be changed if we so choose.

Blocks to building resilience

These are some of the unhelpful or destructive ideas that keep people trapped in nonresilient ways of responding to life's vicissitudes. It's as if they believe that their mindset is truly set in stone rather than changeable.

- * 'I'm one of life's victims.' This means feeling helpless in the face of events, blaming others for one's misfortunes and not taking responsibility for effecting change. Wolin and Wolin (1993) caution that the expectation of sympathy that comes with victim's status is 'enticing bait'; however, the sympathy that comes, and may well diminish over time, means forever bewailing one's lot in life in order not to lose it.
- * 'I'll never get over it.' The 'it' may be a trauma that the person believes destroyed her life and sense of security and identity. Post-traumatic growth is unlikely to happen while the client believes that nothing good, hopeful or useful can ever come from anything so bad. There is a hopeful meaning likely to be found if she searches for it.
- * 'I'm a failure. There's no point in trying to change.' Such self-devaluation keeps the person in a state of demoralized inertia as he acts in accordance with his self-image. Your behaviour may fail at times but you are so much larger than any specific experience you face, and to define your worth on the basis of that experience is to diminish both yourself and your prospects of developing resilience (Dryden, 2010).
- * 'I don't want to do anything that is dull, boring, tedious or frustrating.' This discom-

fort avoidance keeps the person from embracing the hard work and effort involved in change and goal-achievement. Ironically, she may well experience a low-level state of chronic discomfort about the stasis in her life through such avoidance. Experiencing some daily discomfort – facing instead of avoiding difficulties – is a healthy indicator that progress is now being made towards her goals.

* ‘Why me?’ The answer is usually implicit in the question: ‘I don’t deserve this. I’ve done nothing bad.’ The question is actually an unanswerable one and any answer offered is likely to be dismissed as unsatisfactory. ‘Why not me?’ offers a radical change of perspective by stating an unpalatable fact: no one is immune from experiencing misfortune or tragedy in life. The just world view gets in the way of internalizing this perspective.

* ‘It shouldn’t be this way!’ Denying reality just prolongs and usually exacerbates the person’s current difficulties. Facing reality requires an acceptance (not in the passive sense) of what is happening and an accurate appraisal of what is within his control in order to manage the situation constructively.

* ‘You can’t escape the past.’ The past maintains its unshakeable and malign grip on the person’s present behaviour. It’s not the past per se that maintains this grip but the beliefs that she has constructed about the past that keeps her in thrall to it (e.g. ‘Being adopted made me realise how bad I must be that my parents didn’t want me’). Breaking the grip of the past begins with changing her current beliefs about it; past events remain unalterable.

Resilience is ordinary, not extraordinary

This is what the resilience research consistently shows.

Resilience is not magic; it is not found only in certain people and it is not a gift from unknown sources. All humans have the capacity to become resilient – everyone is able to learn how to face the inevitable adversities of life; everyone is able to overcome adversities and be strengthened by them. And everyone can be transformed by these experiences ... you can begin or enhance the process [of resilience] at any age or stage of your life (Grotberg, 1999: 3).

Resilience can be found in everyday life – Brooks and Goldstein believe that ‘developing a resilient mindset will serve us well in every aspect of ordinary living’ (2003: x) – but which you might dismiss as ‘just getting on with it’ such as taking the children to and from school, looking after pets, holding down a job, caring for an elderly parent. However, what would happen to the children, pets, jobs and elderly parents without your persistence, dedication and problem-solving? Resilience can also be found in analyzing ordinary situations which you coped poorly with such as, ‘I get into such a state when I get lost driving to a new place’. Just because you didn’t immediately rise to the challenge and overcome it doesn’t indicate ineffectiveness: it takes perseverance to find an effective response to the situation. And in our perseverance we can tap into undiscovered strengths and gain valuable insights about ourselves that probably would not have been uncovered if we were able to take every situation in our stride. As Grayling (2002: 39) observes: ‘It is not what we get but what we become by our endeavours that makes them worthwhile.’ Learning and self-development can occur in any situation if we keep our minds open and curious.

The enduring mystery of resilience

Resilience is a fascinating subject and there is much to learn about it from studying the research literature, reading inspiring stories of courage and endurance and observing how we and others handle the challenges facing us. And yet, despite resilience being ordinary, not extraordinary, what makes a person keep on keeping on in the face of persistent adversity is still something of a mystery, but a riveting one. Coutu (2003) suggests that we will never completely understand the nature of resilience. As Goldstein and Brooks (2005: 10) ponder:

It has yet to be truly understood and defined how a child who grows up with a learning disability in a poverty-stricken home, in a high-risk neighbourhood, with parents exhibiting mental illness can and does overcome these adversities and transitions successfully into adult life.

How indeed does it happen?

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The Effects of Rational-Emotive Behaviour Therapy with People Who Have Behaviour Problems with Their Dog

Jacky Smith

This study investigated whether people who experience behaviour problems with their pet dogs report a greater reduction in their dogs problem behaviour when given Rational-Emotive Behaviour Therapy (REBT) training as part of their behavioural homework, than people who receive dog behaviour therapy without challenging their irrational beliefs. A sample of 36 dog owners was split into two groups. Both groups were given dog behaviour therapy, but group B were also given REBT training and REBT homework. Data was gathered on the day and two weeks afterwards using the Canine Behaviour Scale (developed for the experiment), The Dog Parent Scale (adapted from the Parenting Scale), and the Shortened General Attitude and Belief Scale. The results showed that those dogs whose owners who were given the REBT with dog behaviour therapy made the greater reductions in undesirable behaviour. This study suggests that reducing a dog owner's irrational beliefs can lead to dog parenting styles which help improve their dog's behaviour.

Key Words: *Pet Parenting, Rational Emotive Behaviour Therapy, Irrational beliefs, Dog behaviour*

Introduction

The focus of this study was to ascertain what effects incorporating Rational-Emotive Behaviour Therapy into a group dog behaviour therapy session would produce. While there are many books written about dog behaviour, the main focus of most literature and TV programs on the subject is on changing the dog's behaviour & there appears to be very little published works on changing the owner's beliefs, and none on REBT & dog behaviour.

There are however many published works on parent training and REBT and parenting, and as well as looking at dog owners irrational beliefs, this study in the literature search looked at child parenting programs to assess what similarities could be found and whether any applications could be transferred to dog behaviour therapy.

Rational-Emotive Behaviour Therapy (REBT) & Irrational Beliefs

"Rational-Emotive Behaviour Therapy (REBT) is one of the cognitive-behavioural approaches to psychotherapy" (Dryden 2005, p.1). Originally developed by Albert Ellis in 1955, REBT is a system of therapy which helps people examine and dispute their irrational beliefs systems and helps them construct new rational beliefs that are then cognitively, emotionally & behaviourally re-enforced throughout the client's therapy. Irrational beliefs can be defined as "a thought that is logically incorrect, inconsistent with empirical reality, or inconsistent with one's long term goals" (Walden, Di Giuseppe, & Dryden, 1992, p.358 cited in Weinrach 2006).

The difference between REBT and other therapies is that this approach works towards helping clients achieve "profound philosophic change" (Weinrach 2006). Dryden (2005, p25) put forward that philosophical change could be evidenced when clients gave up their irrational beliefs and adopted a rational way of thinking in "broad areas of their lives or generally". Ellis said that "The goal of REBT is not only to show clients what their specific irrational

philosophies are, but how they construct these ideas and how they can think more rationally, thereby unupset themselves, and thereby create fewer dysfunctional beliefs in the future". (Ellis 1999).

This theory puts forward the hypothesis that people are mostly responsible for their emotional and behavioural wellbeing and reactions. This theory acknowledges that negative things do happen to people and that they do have an emotional impact on them, but it is proposed by REBT theory that it's the thoughts/beliefs about a situation that cause the emotional disturbance, not the actual events in themselves, since three different people could in fact have vastly differing views about the same event.

The stoic philosopher Epictetus sums this idea up by the maxim 'People are disturbed not by things, but the view that they take of them'.

Ellis & Dryden (1999) discuss that the reasons people become disturbed, are due to people making absolutistic "demands about themselves, others and the world". When these demands are not met, a person who holds a demand rather than a preference might find themselves thinking "I'm useless", "He's a bad person", "The world's a terrible place, and life's not fair". They might also suffer from low frustration tolerance whereby demands that life conditions must be comfortable exist in the persons thinking. Therefore holding a preferential non demanding flexible belief is believed to be the key to sustained good mental health. (Dryden 2002).

Rational-Emotive Education (REE)

Is an extension of REBT and has been extensively developed by Dr William J Knaus to be an educational system which can be taught in schools such as The Living School (www.livingschool.org) in America. In his manual Rational-Emotive Education (Knaus, 2008), Knaus discusses that REE is a preventative-interventionist method whereby a non clinical population can be taught rational skills and methods to achieve & maintain good mental health. Knaus postulates that REE can be adapted to most educational models and is group based approach.

Knaus puts forward that REE advocates "positive self-acceptance, critical thinking, the application of the scientific method to self-understanding, and behavioural change", (Knaus, 2008, Rational-Emotive Education, p.5).

There have been many other parent education programs developed (e.g., Dinkmeyer & McKay, 1982, 1983; Gordon, 1978; Forehand & McMahon, 1981) and in more recent times The Incredible Years (Webster-Stratton 2006) & Triple P (Sanders et al, 2003). These programs are primarily based on changing the child's behaviour through encouraging the parents to develop parenting skills. They rarely address the issue of the parent's own irrational beliefs and how this might impact on the child and its behaviour.

Carolyn Webster Stratton-The Incredible Years

The Incredible Years Parenting Program was developed by Dr Carolyn Webster-Stratton and was the winner in 1997 of the United States Leila Rowland National Mental Health Award for outstanding prevention programs and was recognised by the Office of Juvenile Justice & Delinquency Prevention, (OJJDP), and a branch of The United States Justice Department as an exemplary best practices program.

The Incredible Years Programs are now internationally recognised and used both in the Head Start program in America and the Sure Start Program in the UK. Others in the UK that use this program are; The Alder Hey Children's Hospital in Liverpool, The Maudsley Psychiatric Hospital, London, C'mon Everybody in Sheffield and the Family Nurturing Net-

work in Oxford. These programs are aimed at helping parents whose children are exhibiting a wide range of emotional and behavioural problems.

Webster-Stratton suggests four main suggested delivery systems depending on the severity of the child's issue. The first is a mainly preventative measure and information concerning the Incredible Years ethos are available to the general public through books (e.g. Webster-Stratton 2006) videos, and CDs and can be bought by parents or loaned from libraries, it can be part of the health visitors toolbox and can be used as part of their role when deemed appropriate or necessary.

The second delivery method is a 12-18 week basic parent training program delivered by teachers, family service workers and school counsellors. This program would primarily be aimed at those:

“Populations which are socio-economically disadvantaged or at risk because of the increased risk factors for mental health problems associated with the particular populations. For example, living in poverty is often associated with parental unemployment, housing difficulties, lack of family health care, and poor nutrition or home stimulation” (Stratton, 2007, Incredible Years).

The third delivery system recommended is an 18-28 week basic + advanced program parent group training course taught by teachers or counsellors and would be aimed at parents whose children were manifesting symptoms. At this stage there would also be a specific program targeted to the children called the Dinosaur Program which aims to help children develop social skills and problem solving techniques.

The fourth delivery method would be an 18-28 week basic + advance + school parent programs, this small group treatment would be delivered by counsellors and aimed at those children and parents with oppositional defiant disorder or conduct disorder or attention deficit disorder.

The main philosophies Webster-Stratton puts forward are; the ability to play in a positive way with a child, to give positive attention, praise and encouragement, to offer tangible rewards and incentives, to set boundaries and stick to them, to ignore bad behaviour, to give timeout when a child needs to calm down, to facilitate natural consequences, to teach children to problem solve, to help children learn to regulate their emotions, to help children learn to socialise.

The main ideas aimed at treating the parents are: to control upsetting thoughts, to learn to control stress, to learn effective communication skills between the parent and child and parent to parent, and to be able to work with the child's teacher.

Behavioural techniques for specific problems are also discussed and advised upon. So to sum up, the Incredible Years system looks at the parent child relationship, effective ways the parent can parent and finally ways in which to treat specific behavioural problems the child is exhibiting. The main emphasis that Webster-Stratton denotes is that of the parent having a harmonious relationship with the child, through empathy, patience, play, clear boundaries, and consistency. (Webster-Stratton 2006). John J Wilson from the (OJJDP) assessed the Incredible Years Training Series and concluded that;

“The BASIC program appears highly effective in reducing child conduct problems by promoting social competence, reducing parents' violent methods of discipline, and improving their child management skills. For clinic children with conduct problems, the cycle of aggression appears to have been halted for approximately two thirds of the treated families.” (Wilson J. J.p.19 2000).

The ADVANCE program was shown to be highly effective in helping parents use “effective problem solving and communication skills, reducing maternal depression, and increasing

children's social and problem-solving skills" (Wilson J. J.p.19 2000).

Triple P Parenting

"Triple P draws on social learning, cognitive-behavioural and development theory, as well as research into risk and protective factors associated with the development of social and behavioural problems in children." (Triple P, 2008)

Professor Matthew Sanders, Carol Marki-Dadds & Karen Turner from the Parenting & Family Support Centre, University of Queensland in Australia developed Triple P in 1977 and findings were first published in 1981 (Sanders & Glynn, 1981). This is a multi level primarily behavioural prevention program. The program has five levels of intervention for parents of children aged from birth to 16 years with increasing strengths of behavioural problems.

Level 1 Universal Triple P is aimed at all parents attracted to enhancing their child's development. Information is dispersed through media, telephone, books, DVDs, brief consultation and group presentations.

Level 2 Selected Triple P & Selected Teen triple P is aimed at parents who have children with specific behavioural or developmental problems. This might be provided by health staff trained in Triple P methods. Treatment is usually self directed or can be group or face to face sessions.

Level 3 Primary Care Triple P & Primary Care Teen Triple P, would be provided by the same practitioners and would be aimed at a similar group of parents but who need specific skills training. A brief therapy program consisting of 1-4 sessions face to face or by telephone with the focus being on teaching the parent to child management techniques.

Level 4 Standard Triple P, Group Triple P, Group teen triple P, Self Directed Triple P & Stepping Stones Triple P is provided by mental health staff and counsellors and is used by parents wanting help for children with severe behavioural problems and is usually an intensive program and can be face to face, group and telephone consultations.

Level 5 is Enhanced Triple P & Pathways Triple P and is provided by counsellors and mental health professionals and is aimed at parents who might mistreat their children and incorporates anger management classes. (Sanders et al 2003).

Saunders et al (2003 put forward that Triple P is based on social learning principles & is a behavioural family intervention, they state that the aim of their programs are to:

"1) Enhance the knowledge, skills, confidence, self sufficiency and resourcefulness of parents; 2) promote nurturing, safe, engaging, non violent and low conflict environments for children; and 3) promote children's social, emotional, language, intellectual and behavioural competencies through positive parenting practices." (Saunders et al 2003 p. 3)

While Triple P and the Incredible Years both advocate training the parents to parent more effectively and both use cognitive behavioural techniques to help both parents and their children, what they both appear to lack is the concept of challenging the parent's irrational beliefs, such as advocated by REBT theorists such as Marie R Joyce.

Rational-Emotive Parent Education

Marie R Joyce developed a REBT based treatment manual and positively tested its effectiveness in an eleven week trial (Joyce 1995). The experiment was based on:

- 'a) Reducing emotional stress through disputing irrational beliefs,
- b) Implementing rational discipline methods,

c) Rational problem solving skills

d) Fostering rational thinking traits in their child.

Four dependent variables were studied: parent irrationality, parent emotionality, parent perceptions of child problems and the perception of participants' parenting by their spouses.' (Joyce 1995 p.55)

Results showed that parent's irrationality, guilt and anger were significantly reduced and effects were suggested to be maintained after a 10 month follow up. Other results that were noted were a reported reduction in the parent's perception of their child's behaviour. Joyce argues that her study endorses the core REBT theory that beliefs effect emotions. Her findings indicate that there is a relationship between parental beliefs and what emotions these parents have when parenting.

Parental low frustration tolerance (LFT) was found to have the highest correlation with unhealthy negative emotions and therefore Joyce postulated that teaching parents to increase their levels of high frustration tolerance (HFT) would be positively beneficial in the parent-child relationship.

Joyce concluded that overall her study showed that when parents were given a REBT based parenting program that directly challenged the parent's irrational beliefs, the results were, increased self worth and decreased stress symptoms, with an increase in positive child behaviour.

Joyce (2006) discussed the evolution of REBT in the field of parenting and noted that from the early days of psychoanalysis whereby unconscious influences were deemed to be the cause of all problems, to behavioural theories which advocated reinforcement practices, to attachment theory (Bowlby, 1988) where the attachment/bonding of the infant to its parents, particularly the mother was considered the most influential factor. Joyce found within the attachment theory a concept called Internal working models (IWMs) and noted that this was a cognitive mechanism and said;

"IWMs which evolve within the child's mind are internal representations of attachment figures and their likely responsiveness to the child's needs. Healthy experiences in infancy and early childhood lead to secure attachment mediated by positive IWMs" (Joyce. P.179 2006)

Joyce (2006) therefore stresses as far back as infancy the important role of cognitions. She argues that these early formed cognitions will influence the child's own parenting styles in adulthood. (Serbin & karp, 2003 as cited in Joyce 2006). Haulk (1967) found that different types of irrational beliefs lead to different parenting styles: Unkind and firm patterns, Kind and not firm patterns and Kind and firm patterns, which was identified as the desirable style to practice.

"*Kind and firm* child-rearing practice is the preferred and skilled form of parenting. Parents who raise their children in this fashion talk and reason with them about objectionable behaviour, focus on the behaviour but do not blame the child, set limits with clear consequences for rule violations, set punishment that is related to rule learning, not blame, sometimes frustrate their child when necessary, apply reasonable pressure to teach self-discipline and delay of gratification, never punish out of anger and frequently praise and show love." (Joyce 2006 p.178)

This agrees with previous research into parenting styles (Maccoby & Martin 1983 cited in Daniel et al 1999) whereby parenting styles were generally categorised as, authoritarian (high control, low warmth), authoritative or democratic (high control, high warmth), indulgent (high warmth, low control) and indifferent (low warmth and low control). The parenting style which exhibited high control and high warmth was deemed to have the best outcome for the child.

Joyce summarises that her findings were “supportive of a Rational-Emotive Education approach to reducing the everyday stresses of parents. Counsellors engaged with parent populations may consider a cognitive intervention such as the Rational Parenting Program to be effective in changing parent irrationality and associated emotionality.” (Joyce 1995. p.72).

Summary

Parent training combined with child therapy has historically provided the most effective combination of treatment for children exhibiting behaviour problems and for parents who find it difficult to cope. However these programs focus on child management skill, and parent skills and although Joyce (2006) has focused on reducing parental stress through REBT there seem to be little public available programs that specifically change parents irrational beliefs and thereby change their parenting abilities, and through helping parents to become more rational, live with their child in a more positive and healthy way which might naturally facilitate the right environment for more positive behaviour on the child’s part.

Dog behaviour

Relationship between Canine & Humans

The fact that dogs have evolved from wolves has been postulated for many years and has now been established by DNA testing. Research by Savolainen, et al (2002) revealed that by examining mitochondrial DNA (mt DNA) from 654 dogs from around the world, there was evidence that pointed to domestic dogs originating from a single gene pool from East Asia around 15,000 years ago.

The relationship between humans and their pets is today very different for most people than it was originally 15,000 years ago. Coppinger (2002) was quoted as saying “It was natural selection-the dogs did it, not the people” Coppinger believes that canines are descended from wolves when they first started to spend time around man when they realised that our rubbish dumps were an extra source of food. Gradually the braver ones would venture into our villages and it would be noted that certain wolves would have particular talents such as guarding or herding and these would be bred from hoping to pass on that talent.

From this early symbiotic relationship, our modern dog is postulated to have been derived from. Hare et al (2002), found that domestic dogs have evolved a special ability to pick up on human communicative signals and this has enhanced the relationship between the two species.

In some parts of this country and indeed in many parts of the world the relationship is still primarily a working one, but for our modern pets both dogs and cats have some owners who have very different expectations from their relationship, and the relationship in many cases has moved from that of a working dog to that of a companion. (Spencer et al 2006)

As dogs have moved from living on the fringes of our society to in some cases sleeping in our beds and becoming a fully integrated part of the family, so along with these drastic living condition changes have come about a surge in reported behavioural problems and an increase in need for pet behaviour therapists with the result of university courses and professional bodies such as the Association of Pet behaviour Counsellors (ABPC).

The Pet Food Manufacturers’ Association’s statistics for 2004 put the dog population in the UK at 6.8 million and the cat population at 9.58 million. There are 5.2 million dog owning homes and 1 in 2 households own a pet of some kind, (Pet Food Manufacturer’s Association, 2008).

The Blue Cross’s 2006 census revealed that; “50% of owners got their dog for companionship

and love.” It also stated that “results indicate that dogs’ behaviour causes more concern for their owners than any other problem.” (Blue Cross, 2008).

There is an increasing interest in pet behaviour therapy and particularly in dogs as is evidenced by the surge in TV programs such as Dog Borsal on BBC3, It’s Me or the Dog on Channel 4, The Dog Whisperer on Sky 1, Animal Road Show on Animal Planet, & At The End Of My Leash on Animal Planet.

Southampton University was the country’s first university to hold a Degree & Masters in Companion Animal Behaviour Therapy led by Dr Anne Mc Bride. The Centre of Applied Pet Ethology (COAPE) also holds accredited courses (Open College Network) for people wishing to study in the subject. There are also many books and online material to accommodate those interested.

Vets across the UK will now refer clients to a behaviourist and will often refer to a counsellor from the Association for Pet Behaviour Counsellors (Association of Pet Behaviour Counsellors, 2008)

Most courses place the majority emphasis of study on the dog’s behaviour as do the various books written on the subject. Little has been researched and taught about how to educate people to become better ‘pet parents’, and there was no literature found that challenged the dog owner’s irrational beliefs that they themselves might hold concerning the way they parent their dog.

The question of whether people parent or own their dogs is individual to each dog owner. Spence et al (2006) argues that although our pet dogs kept largely for companionship or as an expression of the owner’s personality, he relates our relationship with pets to slavery and questions the ethics of keeping pets at all. However, the fact remains that in recent and particularly from the 20th century onwards that the rise in pet ownership has grown around the world. (Spence et al 2006).

Obviously in the true meaning of the word people cannot parent a dog as they do not give birth to them, but equally people foster/adopt children and could say that they parent these children. Therefore it could be argued that people might practice parenting skills on their pet dog.

Whether a person will choose to use parenting skills in any form or will choose to use force and domination may depend on their belief about the dog’s state of consciousness. Spencer et al (2006) examine the history of keeping pets and the welfare implications for pets in relation to our beliefs. The Roman Catholic Church has stated that, “animals have no souls”, (Serpell, 1986, p.162), and as recently as 1994 they were still acclaiming that animals could be used “for the good of humanity” (Spencer et al. 2006, p.19)

Whether a canine is conscious or not has not yet been proven, however William Helton (2005) looks at Rossano’s idea and says that;

“Rossano (2003) proposes using expertise as an indicator of consciousness in humans and other animals. Since the development of expertise requires deliberate practice (Ericsson 1996, 2001; Ericsson and Charness 1994, 1997), and deliberate practice appears to be outside of the bounds of unconscious processing, then any signs of expertise development in an animal are indicators of consciousness.” (Helton p.67, 2005)

The ability therefore to become an expert could be argued as an indicator to an animal being conscious and Helton points out Darwin’s theory of evolution whereby species evolve over time. He infers the question if we have evolved from apes, when did we become conscious? At this time there is no definitive answer to the question and Helton re-enforces his point that dog are renowned at becoming experts and this can be witnessed when observing dogs having been specifically trained for a job such as drug sniffing dogs, cancer sniffing dogs,

dogs helping disabled people and even pet dogs learning new tricks. If expertise is an indicator of consciousness then the canine species as well as other species who display expertise cannot be ruled out as having attained consciousness.

The implication for treatment of dogs exhibiting behavioural problems may well be indicated by the beliefs that their owners hold around the issue of how conscious their pet might be. If owners hold that a dog has no soul and, or no consciousness they may well be treated very differently than those dog owners that believe their dog has a form of consciousness and sentience.

Dr Donald R Green was quoted as saying:

“The possibility that animals have mental experiences is often dismissed as anthropomorphic...But this widespread view itself contains the questionable assumption that human mental experiences are the only kind that can conceivably exist. This belief that mental experiences are a unique attribute of a single species is not only unparsimonious; it is conceited.” (King T, 2004, p.5)

Helston and Rossano’s ideas could be put forward as an argument that if dogs do have some form of consciousness, then similar parenting skills and parent training programs that have been shown to be effective and empirically validated with children and their parents, might have an application in dog behaviour therapy whereby people might use similar programs to resolve behavioural problems that they are experiencing with their pet dog and help address their own parenting beliefs and enhance their skills and relationship with their dogs.

Good reasons for addressing the way people look after and relate to their pets can be found in the UK’s rescue charity statistics; the RSPCA latest statistics are quoted as;

Inspectorate Statistics

2006

Phone calls received 1,169,229

Cruelty complaints investigated 122,454

Convictions 1,647

Defendants 898

Rescues 17,750

Establishments inspected 635

Animal collections 146,360

2005

Phone calls 1, 69,057

Cruelty 110,841

Convictions 2,071

Defendants 1,013

Rescues 13,907

Establishments inspected 744

Animal collections 138,563

(Source: <http://www.rspca.org.uk>, 2008)

As can be seen there has been an increase in animal cruelty from 2005 to 2006, and there could be put forward an argument that dog parenting skills and indeed pet parenting skills might make a difference to the vast number of animals that suffer cruelty due to owners not

fully understanding the needs of their pet and having irrational ideas about life with their pet.

Current Dog Behaviour Therapy

When a dog owner perceives that they have a behavioural problem with their dog they might seek self help through available books on the subject, and or they may contact their veterinarian for a referral to a dog behaviour consultant. The dog behaviourist might see the dog and its owners in the dog's home or in a consulting clinic. After an examination and diagnosis a behavioural program is usually developed to address the issues found to be needing attention. The majority of behaviourists see the dog with its family once and then will ask for progress updates and continue to give the owners advice for the duration of the program. Some behaviourists will refer to dog trainers for parts of the program and some behaviourists may see owners more than once (Association of Pet Behaviour Counsellors, 2008)

To date in the UK most dog behavioural advice has been based on changing and managing the dog's behaviour only. Some articles that looked at the impact of the owner's behaviour on the dog were Voith *et al.*, 1992; O'Farrell, 1995; Jagoe & Serpell, 1996. There were no available courses, or advice on the web or in the format of books found, that incorporated changing the owner's irrational beliefs about their dog, its behaviour, and the way they related to the dog and lived with the dog.

Waggoner (2006) addresses issues of how to have fun with the dog, how to give the dog comfort, security and love. King (2004) looks at issues that arise in puppyhood, adolescence, and adulthood and addresses some specific behavioural problems from a management stance e.g. when talking about a desensitization and counter-conditioning techniques she doesn't address the role of the owner's beliefs about the problem and their expectations of the dog.

Fisher (1991, 2002) & Neville (1991) are recognised as two of the founding dog behaviour experts in the UK and contributed to some of the best known dog behaviour courses such as those from The Centre of Applied Pet Ethology (COAPE). Both wrote extensively about dog behaviour problems and how to address the issues. Their work along with Rogerson (1991) gives informative and concise advice aimed at the general public that may be experiencing a variety of problems with their dog, however the issue of the owners beliefs, state of mind, family dynamics, and other environmental factors such as poverty, abuse, owners who might be depressed, alcohol or drug dependant, working long hours, etc are not addressed. It has been noted in research with parenting children that all these factors can have a huge impact on a child's behaviour particularly maternal depression (Talati et al 2007), but seems to be a generally ignored subject in past and current works on dog behaviour.

Attachment

Attachment theory (Bowlby 1953) has long been looked at to assess the bond between mother and child. Bowlby stresses the importance of a secure attachment to mother or caregiver and proposes that it is the prime and most basic need in a baby's life. (Bowlby,1973). Oxford et al (2000) proposes the link between a secure attachment and positive early life outcomes and an insecure attachment with negative life outcomes such as delinquency and drug abuse and suicide. Their findings indicate that the type of attachment formed in early life can have profound and long term implications. They suggest help for parents in the form of;

“Prevention programming that aims to enhance child attachment during the early elementary school years can assist parents (and teachers) in strengthening the family process. Programs can encourage parents to provide developmentally appropriate opportunities for involvement.” (p.67)

Moehler et al (2006) examined maternal depression and found it played a significant role in the type of attachment that is formed and concluded that a mother depressed in the child's first year of life could have a negative impact on the child's development up to 8 years after the mother's depression. They stated that their findings were;

“Highly relevant, because impaired mother–infant bonding has been regarded as a risk factor for the whole spectrum of mother–child relationship disturbances including child abuse (Brockington et al, 2001). Therefore, these data give another reason for significant concern regarding ‘depressed’ mother–child dyads.” (Moehler et al 2006 p.276)

Beck & Madresh (2008) took Bowlby's attachment theory and examined the relationship between pets and humans. The focus of their research was to ascertain if humans could have a similar attachment to pets as they might feel towards a romantic partner. They concluded that “pet owners experience more security in relationships with their pets than with their romantic partners.” (P.52)

Prato-Previde et al (2003) specifically examined the question of whether dogs formed an attachment to humans as children do to their care mothers/caregivers. They used the Ainsworth's ‘strange situation’ procedure (Ainsworth, 1964, 1967, 1969, 1989), and concluded that;

“Adult dogs’ behaviour in the Strange Situation test resembled that of human and chimpanzee infants to a remarkable degree. Our results clearly indicate that the dog–human relationship is an affectional bond, but our evidence that it conforms to an attachment is not entirely conclusive.” Prato-Previde et al (2003, p. 246-247)

From the research that Prato-Previde et al (2003) carried out it appears that further research into the dog-human relationship and the issue of whether or not the dog exhibits a strong attachment similar to that of a child is warranted. However based on their research it seems that they were able to establish that the dogs can have very strong bonds with their owners and Beck & Madresh (2008) concluded that humans can have a very strong bond with their dogs.

Marinelli et al (2007) also investigated the bond between dogs and humans and found that the depth of a dog's attachment depended on length of time it had lived with the owner, and they concluded that dogs had the greatest bond with owners “who had previous experience with pets and those who had many emotional bonds” p.143. For humans, they found that “people more attached to their dogs are those who do not live with children and who do not have many emotional bonds.” P.143

The above research could indicate that if as indicated that dogs form strong attachments or bonds as puppies to their owners, future research may establish the long term effects that a good attachment or negative attachment might have on the puppy as it develops and what behavioural impact this might produce in the dog.

Future research might also look at attachments with rescued dogs, and whether a good bond formed at a later stage in the dog's life with rational owners can have a positive impact on the behavioural problems and temperament of the dog.

It would appear that with the increase in dogs living with humans as companions there has been an increase in dogs exhibiting behavioural problems as man struggles to fit this animal into his current modern lifestyle. Although there are no official statistics to be accessed on the number of yearly reported behavioural problems, an increase can be indicated by the surge of TV programs on the subject and the increase of available books and courses on dog behaviour as previously noted.

Current dog behaviour advice in the UK is based along fairly similar lines as current child behaviour programs, (with the exception of Joyce's Rational Parenting Program) (1995),

whereby the issue of just attempting to resolve the behaviour of the dog is the prime issue that is addressed.

The human-dog relationship has changed in the last 15,000 years from that of working dog to companions living in households (Marinelli et al 2007), and companion dogs in 2008 display behaviours that would not have been applicable in the wild, such as separation anxiety, house training, stealing children's toys etc, there could be argued the case that a comprehensive behavioural program aimed at not only treating the dog's behavioural problems, but addresses the owner's irrational beliefs concerning their overall relationship with the dog and it's problems, might prove to be an effective approach for addressing the relationship between dog and human, and the problems therein that can develop.

It would seem that as the relationship between dog and human has a long established history and there are no indicators that this will change in the foreseeable future, it might be argued that as our understanding of this species increases, it might be time to address our role within that relationship in relation to our beliefs about that role and our beliefs about the dog that we live with.

It would seem there is a wealth of research and parenting programs in the field of parenting programs for children that might be successfully adapted to the field of dog behaviour.

Hypothesis

The purpose of this research was to examine whether people who have problem dogs and seek professional help from dog behaviourists, are able to change their dog's behaviour to a greater degree when also taught Rational Emotive Behaviour Therapy (REBT), and given REBT homework as part of their overall therapy, in comparison with clients who just receive standard dog behaviour therapy, whereby the emphasis is on training the dog and therefore the main focus is on purely changing the dog's behaviour.

The hypothesis of this research was that clients who are taught to change their irrational thinking into rational thinking in relation to their dog, their relationship with it, and are taught to think more flexibly concerning their expectations of the dog's behaviour might be able to make more effective changes with their pet's behaviour than those people whose irrational beliefs are not challenged. Therefore this experiment would have expected to find that in both groups there would be an improvement in the dog's behaviour, but would expect to find a bigger improvement in Group B who had the added REBT, than Group A who had dog behaviour therapy only. The experiment would also predict that in Group A there would be no improvement in their dog parenting skills or their irrational beliefs. Group B would be predicted to show an improvement in both.

Method

Participants

Sixty participants were approached by advertising for pet owners via radio, newspaper adverts, posters and leaflets, they being owners who were seeking help in improving their dog's behaviour. They were divided equally at random between group A, (dog behaviour therapy only), B (dog behaviour therapy with REBT), and Group C (wait list control group). Group C were later discounted from the study and their results were not included in the analysis as their questionnaires came back spoiled due to them not filling them out within the correct time span of a two week period. Seventeen owners in group A agreed to participate in the study, and 19 in group B. The dogs ranged in age from 5 months to 10 years, with a median age of 2. 22 were male and 14 were female.

Design

The design was a 3 between (group: REBT + Dog Training; Dog Training only; Control) design x 2 within (Pre-test/Post-test) design with 3 sets of dependent variables (Canine Behaviour/Dog Parenting/Irrational Beliefs). Sex of dog came later and was not originally included in the design.

The participants were randomly assigned to Group A which received the dog behaviour training and Group B which received the dog behaviour training and REBT training. The experiment was using a comparative outcome strategy designed to measure which treatment was more effective over a two week period.

Materials

Two manuals were designed for the experiment, the first was a Canine Education Behaviour Manual (CBEM), adapted and enhanced upon from the author's previously designed behaviour manual that had been used within her own dog behaviour practice for 14 years. The second manual was a Rational Canine Education Behaviour Manual (RCEBM), (Appendix B1) which was identical to the previous manual but with added REBT training based on the teachings and writings of Windy Dryden.

Measures

The Canine Behaviour Scale (CBS) (Appendix C) was developed by the researcher to measure the dogs' initial behaviour problems and then when tested again in two weeks time, the scale was able to measure change over time. The scale consisted of 64 questions which asked if their dog displayed certain common behaviour problems. The questionnaire was a self report measure. The scale had a Cronbach Alpha of .86. This scale worked well in the experiment and might be improved upon in future research by including different aspects of dog behaviour. This couldn't be investigated in the present analysis due to the small sample size. In future research different factors could be established between behaviours.

The Dog Parenting Scale was successfully adapted from the Parenting Scale (Arnold, D. Et al. 1993), which measures parenting styles and was a self report measure that the participants filled out on the day and two weeks later to ascertain if over a time period their parenting styles had been affected by the experiment. This had a Cronbach Alpha of .89

The Shortened General Attitude and Belief Scale (SGABS) (Appendix C) was a self report measure designed to specifically identify what types of irrational beliefs that the participants held and to measure their levels of rationality and overall irrationality.

Procedure

The manuals that were designed for the experiment were given to all the participants at the start of the experiment. A village hall was hired for the day and group A were seen in the morning for 3 hours and group B in the afternoon for 5 hours.

Group A, participants of which there was 17, were welcomed, and handed a name sticker, the Canine Behaviour Education Manual (CBEM) and the three questionnaires. The participants were asked to fill out their pre test questionnaires and hand them back to the researcher. They were also given the post test questionnaires in an addressed envelope to be posted back two weeks later.

The group was seated in a circle and the researcher introduced herself and explained she was an experienced dog behaviourist of 14 years experience and was investigating the im-

pact of different dog training & behavioural methods, neither of the two groups were aware of which group was the group with the added component being tested. Participants were then invited to introduce themselves, the breed of dog, its age and sex and the problem they were wishing to change.

The researcher gave advice and educational information on common behavioural problems and on each specific behavioural issue based on information that could be found in the Canine Behaviour Education Manual (CBEM). Individual homework was set for each participant based on behavioural and training methods aimed at changing specific behaviour found within the CBEM.

The participants were asked to send in second set of questionnaires in two weeks time. The participants were thanked for their time and participation and the session was ended. (These participants were offered the Rational Canine Education Manual after the results were confirmed a positive for this manual).

Group B, of which there was 19 participants were welcomed, given a name tag and the Rational Canine Education Manual (RCEM) (Appendix B2) and the three questionnaires to fill in post test and given three questionnaires to post back in two weeks time. They followed an initial identical procedure until after they had received the specific advice on how to change their dogs presenting problem.

They were introduced to the main concepts of REBT and taught; the ABCs of REBT, the concept of emotional responsibility, methods of disputing i.e. empirical, logical and pragmatic arguments. They were taught how to create a rational preferential belief, and methods that might strengthen that belief, through use of such tools such as the zig zag form, Rational-Emotive Imagery (REI, Ellis cited in Dryden 2001), and how the use of irrational and rational belief forms were helpful in identifying beliefs (Dryden 2001).

The participants were then asked to do their own ABC on a problem with their dog. They were then asked to create a rational alternative belief about the issue with their dog. In pairs the participants were asked to practice disputing their irrational beliefs that they had identified from their ABC assessment. Finally methods of belief strengthening were discussed to strengthen the new alternative belief, such as the Zig Zag form.

Appropriate homework for each participant was set, based on treating the dog with the methods set out in the CBEM, and REBT home work was set based on the irrational beliefs that they had identified from the ABC that they had worked upon. The participants were asked to put themselves every day in the arena whereby their irrational beliefs concerning their dog's behaviour would be triggered

The participants were asked to use the disputing methods on a daily basis to challenge their identified irrational beliefs, and to also practice strengthening their new rational preferential belief that they had created during the exercise, using a zig zag form, Rational-Emotive Imagery (REI, Ellis, cited in Dryden 2001) and through using irrational and rational belief forms.

The participants were asked to send in a second set of questionnaires in two weeks time. The session was closed and the participants were thanked.

Results — General

Results are corrected for multiple comparisons only where indicated. Since the main predictions related to each group separately, the main results reported are simple comparisons, with appropriate Anova results given only for clarification.

Shortened General Attitude and Belief Scale (SGABS)

The SGABS provides scores for Rationality and Irrationality, with Irrationality divided into six subscales. For both, there were some modest outliers in scores, which were retained, with $z > 1.96$ but < 3.29 .

The scores for Rationality are shown in figure 1 and table 1. For group A there was no significant change in Rationality, $t(16) = 0.07$, $p = .948$, whilst for group B there was a significant increase, $t(18) = 2.3$, $p = .034$. The difference between groups was modest and not supported by a significant interaction between group and time in a mixed Anova, $F(1,34) = 1.8$, $p = .192$.

The total scores for Irrationality are shown in figure 2 and table 2. For group A there was no significant change in Irrationality, $t(16) = 0.8$, $p = .424$. For group B there was a significant decrease, $t(18) = 4.1$, $p = .001$. The difference between groups was modest, and supported only by a trend to a significant interaction between group and time in a mixed Anova, $F(1,34) = 3.8$, $p = .058$. A breakdown of the irrationality scores for group B is shown in table 3.

Dog Parenting Scale (DPS)

A total was obtained for each dog by averaging the scores for each question, after reverse-scoring as appropriate for the original Parenting Scale (Rhoades, & O'Leary, 2007). There are no outliers on this variable. Based on the pre-intervention scores for the two groups combined, Cronbach's alpha for the DPS was .89

The results for the DPS are shown in Figure 3 and Table 4. On this scale, a higher score represents less effective parenting.

For group A there was no significant difference between the scores before and after the intervention, $t(16) = 0.7$, $p = .518$, whilst for group B there was a significant improvement, $t(18) = 3.4$, $p = .003$. The difference between groups was supported by a mixed Anova which showed a significant interaction between time and group, $F(1,34) = 5.6$, $p = .024$.

A three way Anova was conducted to test for any effects involving the sex of the dog. There was a trend to a significant interaction between time and sex, $F(1,32) = 3.3$, $p = .082$, but no significant interaction between time, sex and group, $F(1,32) = 0.2$, $p = .673$. Examination of the means (figure 4) suggests that any effect involving sex would be that the parenting of bitches improves more than that of dogs.

Canine Behaviour Scale (CBS) Validity and norming

The validity of the CBS was analysed, by examining the pre-intervention scores of the two groups combined. Cronbach's alpha was .86

Of the 2,016 pairs of questions, there were significant positive correlations between 297 (15%), and significant negative correlations between 30 (1.5%). The significant negative correlations were therefore few, although "pulls on lead" correlated negatively with 12 other behaviours. The correlation matrix is included in Appendix A, SPSS Output, part 4B.

Pre-intervention CBS scores were computed for each dog, being the total of the scores on the 64 questions. The mean score was 127.9 (SD = 27.2). Skewness and kurtosis were not significantly different from normal. The score did not differ significantly between male and female dogs, $t(34) = 0.8$, $p = .454$. A scatterplot and correlation showed no relationship between CBS and age, $\rho = .221$, $p = .196$.

Comparison between groups [Appendix A, SPSS Output, part 4C]

Figure 5 shows how the CBS differed between the groups before and after the intervention. Precise means and standard deviations are shown in table 5. [There were some modest outliers in scores, which were retained, with $z > 1.96$ but < 3.29].

For both groups there was a significant reduction in CBS: for group A, $t(16) = 7.4$, $p < .001$, and for group B, $t(18) = 6.8$, $p < .001$. The reduction was bigger for group B, as illustrated in figure 1, and shown by the larger effect size (table 1). This difference between groups was significant, as measured by an interaction between group and time in a mixed Anova, $F(1,34) = 7.1$, $p = .012$.

It might be argued that this result should be interpreted with some caution, because the groups differed before the intervention, $t(34) = 2.7$, $p = .010$, but not after it, $t(34) = 0.36$, $p = .723$. It would be desirable to carry out further research to establish that the CBS score will reduce below this level.

Although the sex of the dog was not expected to be an important factor, a three way Anova was conducted to investigate this. It showed a just-significant interaction between time and sex, $F(1,32) = 4.2$, $p = .050$; and a trend to an interaction between time, sex and group, $F(1,32) = 3.3$, $p = .077$. Examination of the means (figure 6) suggests that any such effects would be because the treatment was more effective for bitches, but only in group B.

Table 1. Rationality scores for the two groups, before and after intervention.

	Pre-intervention		Post-intervention		Effect size (<i>d</i>)
	Mean	(SD)	Mean	(SD)	
Group A	14.4	(2.4)	14.3	(4.1)	-0.02 (n.s.)
Group B	16.5	(2.5)	17.8	(2.0)	+0.58*

n.s. = not significant; * $p < .05$

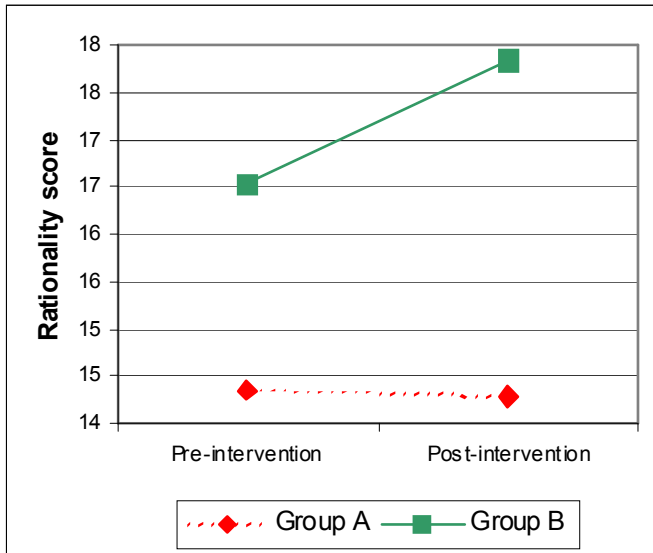


Figure 1. Rationality scores for the two groups, before and after intervention.

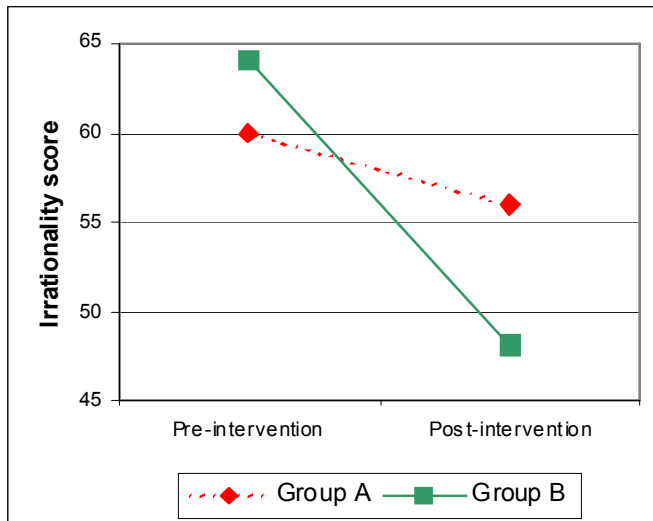


Figure 2. Irrationality scores for the two groups, before and after intervention.

Table 2. Irrationality scores for the two groups, before and after intervention.

	Pre-intervention		Post-intervention		Effect size (d)
	Mean	(SD)	Mean	(SD)	
Group A	59.9	(15.7)	56.0	(19.6)	-0.22 (n.s.)
Group B	64.1	(10.8)	48.1	(15.4)	-1.22**

n.s. = not significant; ** $p < .01$

Table 3. Breakdown of Irrationality scores by component, for group B

	Pre-intervention		Post-intervention		Effect size (d)	$t(18)$	p
	Mean	SD	Mean	SD			
Self downing	6.68	(3.16)	4.95	(1.39)	-0.76 ⁺	2.9	.056
Need for achievement	11.11	(3.30)	8.26	(3.16)	-0.88*	3.7	.010
Need for approval	8.42	(2.50)	6.26	(2.58)	-0.85 ⁺	2.9	.053
Need for comfort	15.16	(2.41)	11.26	(4.17)	-1.18*	3.5	.014
Demand for fairness	14.26	(3.53)	11.00	(4.45)	-0.82 ⁺	2.7	.085
Other downing	8.32	(2.16)	6.37	(2.79)	-0.79**	3.8	.008

+ $p < .1$, * $p < .05$. ** $p < .01$ p -values were Bonferroni-corrected for 6 comparisons.

A multivariate analysis was considered for Irrationality, but rejected for two reasons. Firstly, the authors of the scale have proposed a fixed scoring system for total Irrationality. Secondly, the number of cases was insufficient for such an analysis. Tabachnick and Fidell (2007) note that a good ratio is needed of cases-to-DVs, with a minimum of one case per cell. They add that with too low a ratio, there is a risk of a non-significant multivariate F despite significant univariate F s, a situation which was found in a trial multivariate analysis (Appendix A, part 2B).

Reference: Tabachnick, B. G. and Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson.

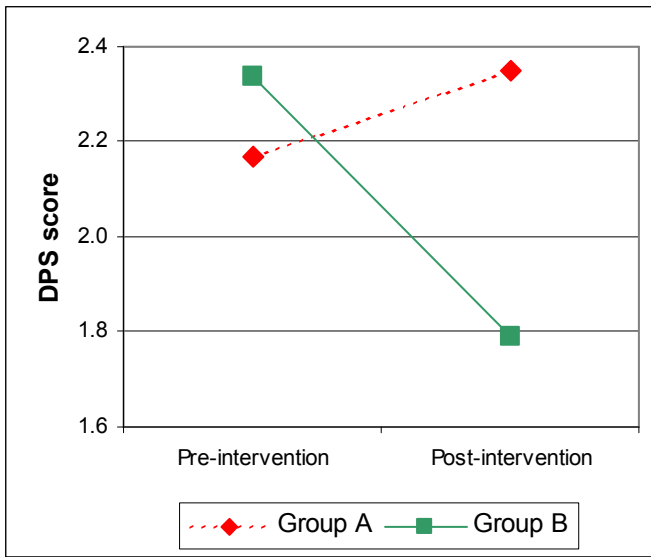
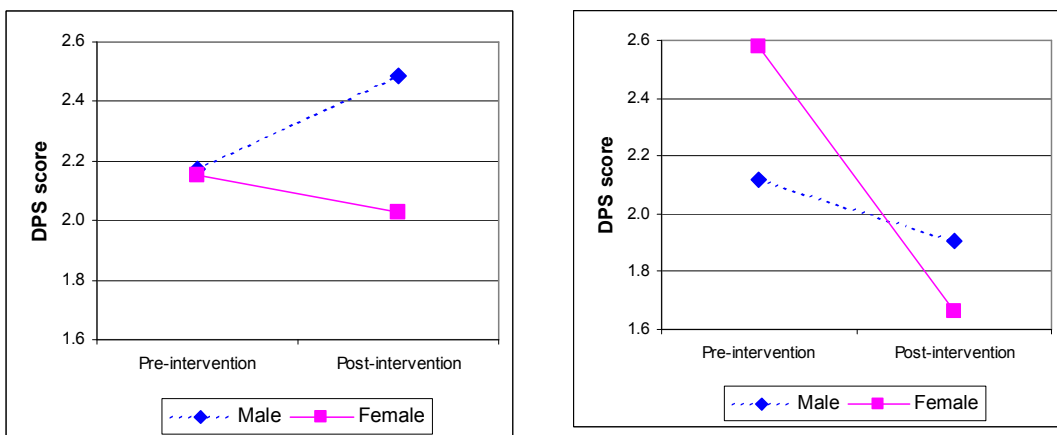


Figure 3. DPS scores for the two groups, before and after intervention.

Table 4. DPS scores for the two groups, before and after intervention.

	Pre-intervention		Post-intervention		Effect size (<i>d</i>)
	Mean	(SD)	Mean	(SD)	
Group A	2.17	(0.86)	2.35	(1.06)	0.19 (n.s.)
Group B	2.34	(0.73)	1.79	(0.76)	-0.74**

n.s. = not significant; ** $p < .01$



Group A

Group B

Figure 4. Effect of time, group and dog's sex on DPS score.

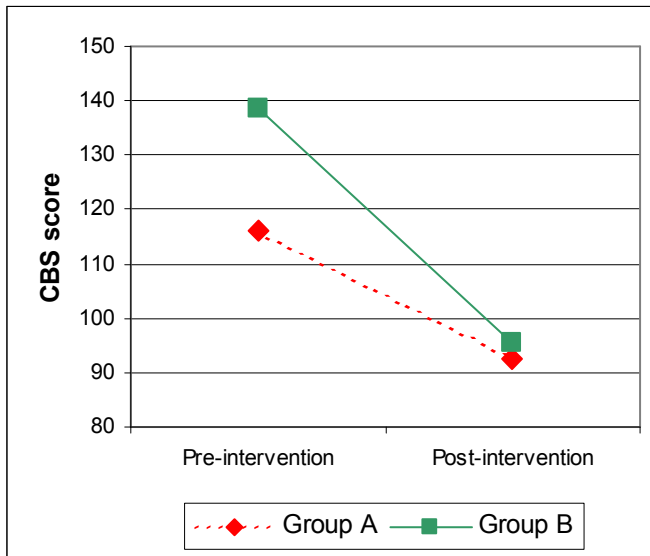
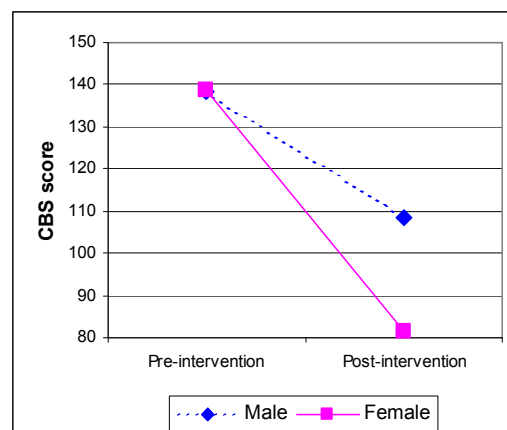
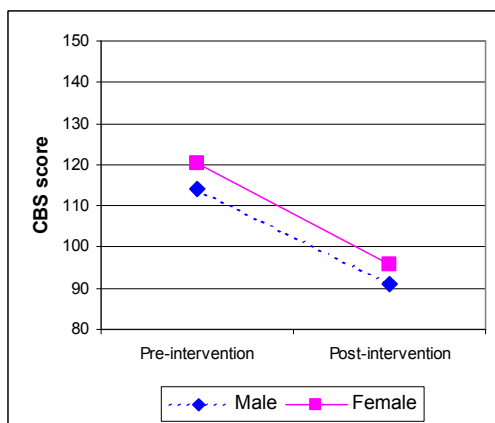


Figure 5. CBS scores for the two groups, before and after intervention

Table 5. CBS scores for the two groups, before and after intervention.

	Pre-intervention		Post-intervention		Effect size (<i>d</i>)
	Mean	(SD)	Mean	(SD)	
Group A	115.9	(26.7)	92.4	(27.8)	-0.86***
Group B	138.6	(23.4)	95.6	(26.3)	-1.73***

*** $p < .001$



Group A

Group B

Figure 6. Effect of time, group and dog's sex on CBS score.

Discussion

The results of this study supports the main hypothesis that by giving dog owners REBT in conjunction with dog behaviour advice to challenge and change irrationally beliefs held by dog owners concerning their dog's behaviour and their relationship with the dog, that the dog's behaviour would improve more than owners who just received advice on how to change the dog's behaviour but without changing their own irrational held beliefs.

The results showed that those dog owners given the REBT through the Rational Canine Education Manual (RCEM) to challenge their irrational thinking, improved in rationality, decreased in irrationality, improved in their dog parenting skills and the dog's behaviour improved more than those in Group A who had not had their irrational beliefs challenged and changed. Interestingly it was the need for comfort and the need for achievement that showed the most improvement although all the irrational belief aspects showed some improvement.

Those dog owners who were working with the Canine Behaviour Education Manual (CBEM) which focused purely on treating the dog's behaviour had an improvement in their dog's behaviour but not as great as those who were using the RCEM). Their rationality showed no significant difference and their irrationality did not show any significant decrease. Their parenting skills showed no significant improvement.

An unexpected finding was that female dogs appeared to show more improvement than male dogs to the treatment, but only in Group B. This would be an area for future investigation.

There was an unfortunate difference in the start of the experiment in that Group B's dogs exhibited more problems than Group A, so although they were randomly selected, they were not similar. Also the sample size was small. A replication of the study whereby the groups were selected for similar behaviours and a larger sample size would be desirable to ascertain the true effects of the added REBT component.

A factor that could have had an effect on the results and would need to be considered in future studies was the differences that culture may have on dog ownership. All the participants were white British and were from an affluent part of the country. It has been noted by other researchers that most cultures that have dogs as companion animals are from affluent western countries such as America, the UK and northern Europe. (Spencer et al. 2005) Therefore if participants were from different ethnic backgrounds the experiment might show very different results, depending on the cultural beliefs concerning dogs and pet ownership of that particular culture.

Another factor that should be considered was that the researcher that carried out the experiment also carried out both treatments, and to afford greater validity, future studies could replicate the study with different dog behaviourists and different REBT therapists.

Child behaviour programs such as the Webster-Stratton, Triple -P and Marie Joyce Rational Parenting Program, have been successfully tested and validated, so the other issue for validity in this experiment is that most dog behaviourists, including the researcher, create their own treatment programs so there is no standardization in treatment, therefore different behavioural programs could be tested to ascertain which program achieves the greatest treatment effect and then test that against the added REBT component, and with the added REBT component.

Other limitations to the study was the time factor, this experiment was done over a two week period, so future researchers might undertake to do a longer study as seen in *The Incredible*

Years, Triple P & Rational Parenting Program, whereby clients are seen on a weekly basis and their parenting skills and irrational beliefs are treated weekly. This would measure the effects over a longer period of time to ascertain if the results hold, improve or decrease with maturation. Measures taken after one year to see if the effect holds might also prove interesting.

Future research might consider incorporating some of the applications from the above parenting courses and combined with dog behaviour therapy and treating the owners irrational beliefs could be a new way forward in helping the dog-human relationship and preventing problems from arising and treating existing problems.

Future research might also take into consideration the other possible effects on the dog's behaviour such as the mental state of the owners such as depression, family environment employment/unemployment, redundancy, family break ups, the impact of children and return to work after having been at home with the dog previously. Future research might also investigate whether different breeds of dogs respond differently, and whether rescue dogs respond different from pets that have always lived with the same owners. A measure to establish beliefs the owners hold about their dog could be developed which might give the researcher a focus for testing and a target for belief change.

The long term implications of this study in relation to the practice and theory of REBT are that this experiment supports the core hypothesis of REBT that when people hold irrational beliefs this effects their emotions and behaviour. It supports the underlying REBT theory that if a person is able to hold rational thoughts they are able to function in a more rational manner, and in the case of this experiment, Group B, who had REBT treatment and homework, were able to use parenting skills and implement the Rational Canine Education Behaviour Manual in a more effective way than Group A whose irrational thoughts were not challenged.

These findings could have a future impact on the practice of pet behaviour therapy, how this subject is taught at the different institutions, and how pet behaviour therapists might practice in the future. REBT could be integrated as part of future courses. Pet behaviour therapists already trained could do add on training in REBT. Publications on Rational Pet Parenting could be developed for the public.

Implications for dogs might be that those who are living in homes whereby their owners approach living with them in a rational manner and implement REBT based behavioural and training programs might facilitate a dog that is calmer and happier and manifesting less behavioural problems. The implications for owners practicing an REBT based approach to living with their dog is, that REBT theory proposes profound philosophical change (Weinrach, S.G., (2006). whereby the understanding that is gained in one domain of the person's life when practicing REBT can become generalized into other domains of his/her life, therefore the dog owner practicing this approach might gain rationality and thereby less disturbance in other areas of their life.

The dog owner practicing the REBT approach might also enjoy a more enjoyable relationship with their dog as their time is not focused on irrational beliefs and unhealthy negative emotions that together might lead to deterioration in the dog-owner relationship.

Rescue Organisations such as the RSPCA could use these findings when considering a person as a home for a dog. A dog belief scale previously discussed could be given to potential owners to assess their beliefs about dog ownership, and people could attend a REBT based training program aimed at rational dog ownership prior to being accepted and taking a dog. The Canine Behaviour Scale and Dog Parenting Scale could also be used to assess after a dog is placed within a home what issues might need addressing by the rescue centre to help facilitate the dog and owner's new relationship.

This is the first time that REBT has been applied to dog behaviour and the success of the experiment suggests that further research into the issue of identifying and addressing the dog/pet owner's irrational beliefs is warranted.

The future design of dog behaviour programs incorporating addressing parenting styles and owner's beliefs would be an interesting area for development. This research only looked at one family member, so future research could look at the whole family's beliefs and parenting styles and motivation to actively take part in their dog's training and parenting program.

Conclusion

Both treatment manuals were successful in changing the participants dog's behaviour, however the manual that incorporated the REBT, (RCEM, Appendix B1) and thereby focused attention to not only helping owners change their dog's behaviour, but also address their irrational beliefs about their dog and it's behaviour, had a greater effect. The experiment supported REBT theory and future research and development in the field of dog and pet behaviour with the incorporation of REBT theory might provide benefits to both owner and dog.

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Putting the Fun Back into Dysfunctional: Is the use of humour in Rational Emotive Behaviour Therapy a desirable condition or an amusing aside?

Daniel Fryer

The use of humour in REBT was strongly endorsed by its creator, Albert Ellis and has been by many other REBT practitioners. However, whilst many other aspects of REBT have been studied and researched extensively and while there is much that has been said on the use of humour in psychotherapy in general, precious little research exists on its use specifically in REBT. This article outlines a brief history of humour and reviews some of the literature that exists on the subject. Finally, it makes some suggestions for future research into the use of humour in REBT.

Key Words: REBT, CBT, humour, review article

Introduction

“A man went to a psychiatrist seeking treatment for depression: ‘I cry a lot. I can’t sleep. I am very unhappy. I don’t enjoy anything. My life is totally miserable. Can you help me?’ The psychiatrist replies, ‘I can cure your depression, but what's the use?’”

The above is a joke offered up anecdotally by Tallmer and Richman (1993) in the therapy room, to a client, for therapeutic end-point and to (as they claim), good effect.

REBT posits that humour is a desirable condition for therapeutic change (Dryden and Branch, 2008). This article aims to endorse that viewpoint.

It will first offer a brief synopsis on the historical views of humour and then move on to a review of research that touches on therapeutic alliance, cognitive and therapeutic change and views of self-worth.

This will be followed by a call for research: five suggestions for future scientific investigation, (specifically on the use of humour in REBT), that build on previous studies.

Humour is considered an important trait. Several theorists claim its use as an indicator of good mental health; whilst several have noted the paucity of research in this area.

Many others outside of therapy also attest to its importance. As Mahatma Ghandi once famously said, “If I had no sense of humour, I would long ago have committed suicide.”

A brief history of humour

The notion of humour and its effects on our mental and physical health come to us from out of antiquity, and is even mentioned in The Bible, where it says, “a merry heart hath a cheerful countenance, but a broken spirit drieth the bones.” (Proverbs 17:22 KJB).

According to Richman (2002), “The field of humour is a study in itself, with extremely wide applications. It is found in all human activities: literature, art, folklore, teaching, and all forms of healing.” (p166).

Until the 19th century, the body was said to be composed of four basic substances, or “humours,” namely (and somewhat disgustingly), blood, black bile, yellow bile and phlegm. Several theorists, including Surkis (1993), Lothane (2008a) and Lemma (2000) have traced

the etymology of the word humour. It originally meant, “moist,” or “moisten.”

Over time, humour came to mean any fluid or juice of either an animal or a plant, but, as Surkis (1993) noted, it became especially associated “any of the four fluids or cardinal humours formally considered responsible for one’s health and disposition.” (p126).

A balance of these fluids made for a good humour, while an imbalance made for ill humour. As Lothane (2008a) stated, “black bile was seen as the cause of black moods, or depressions.” (p180).

According to Robinson (1983), “the recognition of the benefits of humour by physicians in the Middle Ages and to the 19th century is described by Moody (1978) and also in a classic book by a physician, James Walsh (1928).” (p112).

After that, in English at least, humour acquired the meaning by which we understand it today. Both Surkis (1983) and Lothane (2008b) quoted the Webster’s Dictionary definition of humour, thusly:

“That quality in a happening, an action, a situation or an expression of ideas, which appeals to a sense of the ludicrous or absurdly incongruous; the mental faculty of discovery, expressing or appreciating ludicrous or absurdly incongruous elements in ideas, situations, happenings or acts” (Webster’s, 1949).

Humour has had a funny old time of it over the years. In fact, as Richman (2002) noted, “theories of humour and laughter have abounded in the philosophical literature for some 2,500 years, from Plato to Aristotle to the writings of sociologists, psychologists, and physicians of the present.” (p166).

According to Plato, who wrote about it in *Philebus*, humour was a form of malice directed towards people who were considered powerless, while Lemma (2001), noted that in the *Poetics*, “Aristotle also draws attention to the feeling of superiority and the attendant wish to mock and deride, found in humour.” (p26).

And, as Saper (1987), Lemma (2001), and Lefcourt (2002) all noted, in 1651, the philosopher Thomas Hobbes, in *Leviathan*, also argued that humour was aggressive and hostile and that “imperfect” people laughed at those less fortunate than themselves.

However, it wasn’t all doom and gloom on the humour front. The Ancient Greeks thought that comedy would make the crops grow. Richman (2002) argued that there may be a link between this ancient function and the present-day notions of humour’s restorative powers.

As Lothane (2008b) stated, “the generic concept of drama, which in Greek means action, has two genres: tragedy and comedy. Tragedy provides catharsis; comedy provides relief.” (p233).

However, According to Gelkopf and Krietler (1996), the positive view of humour and, by association, laughter, as enhancing the quality of life of mind and body is essentially a new development.

Goldstein (quoted in Gelkopf & Krietler, 1996) said that, “up to the end of the 19th century, in most Western countries, laughter was considered impolite, sinful and even detrimental to spiritual and physiological well-being.” (p236).

However, McGhee (1983b) stated that one popular modern conception of laughter, as a means to reduce built-up energy or tension, was first advanced by Spencer in 1860.

In psychology, one man who devoted a lot of thought to the subject of humour, was Freud.

In 1905, he wrote a seminal work entitled *Jokes and Their Relation to the Unconscious* and, in 1928, a paper called, simply, *Humor*.

He compared humour to dreams, considered it to be a release of energy no longer needed for repressive purposes, thought it a defence mechanism and linked it to aggression and sexuality.

Mosak and Manniaci (1993) said, he who laughs is releasing pent-up energy which has its

basis in sexual and aggressive drives, while Surkis (1993) said, as a defence, humour followed the task of guarding against the origin of pain from inner sources.

According to Richman (2002), "Freud compared humour to dreams. Both operate at more than one level . . . both permit the expression of forbidden drives, thoughts and attitudes. Jokes, however, perform a social function, whereas dreams do not." (p167).

Bader (1993) said it was because jokes were seen by Freud as a disguised expression of hostile and sexual impulses, that psychoanalysts today view humour with such suspicion.

However, Freud also saw the healing side of humour, as Lothane (2008a) noted, "Freud . . . defined humour . . . as a means of obtaining pleasure in spite of the distressing affects that interfere with it." (p183).

He surmised that not everyone was capable of the humorous attitude and called it a rare and precious gift.

As Birner, (1994) stated, "Freud indicated that there was a great value in humour . . . Humour is the emotionally healthy way of dealing with the problems and dilemmas of life, as opposed to unhealthy ways such as drug addiction, depression, neurosis, and psychosis." (p81).

Scientific research in support of the use of humour

Much evidence of the positive effects of humour in psychotherapy is anecdotal in nature, with therapists giving accounts of humorous interventions and their outcomes. However, despite there not being as much rigorous scientific testing in this area as in other areas of psychotherapy, there is literature enough to be reviewed and discussed in relation to REBT.

The use of humour is good news for those who specialise in couples therapy.

Ziv and Gadish (1989; cited in Lemma, 2000) studied the effects of humour on marital satisfaction in 50 married couples. On the husband's side, marital satisfaction was linked to perceptions of their wives sense of humour. Sadly, the results the other way around, were inconclusive. However, Blumenfield and Alpern (1986; cited in Lemma, 2000) reported similar results linking marital satisfaction with humour, while Keltner and Monarch (1996; cited in Lemma, 2000) found that couples who used humour while dealing with mutual conflicts experienced less distress whilst discussing them and increased relationship satisfaction after.

Elsewhere, Coser (1959; cited in Banmen, 1982) found that patients who used humour found it easier to adapt to becoming hospital patients and communicated their fears and feelings concerning their stay more effectively. Coser (1960; cited in Lemma, 2000) also found that staff that used humour whilst working in a psychiatric hospital experienced better group cohesion and less stress.

Solomon (1996; cited in Lemma, 2000), in a study involving 155 adults aged 20 to 94, found humour was positively related to ageing well and a feeling of personal control.

But what about humour used in the therapy room? Rogers (1957, cited in Overholser, 2007) argued that the therapeutic alliance was central to effective psychotherapy. REBT theory also places importance on building and maintaining a strong therapeutic alliance. But, does humour have a positive affect on this alliance?

Whilst not strictly psychotherapy, Levinson, Roter, Mullooly, Dull and Frankel (1997; cited in Sultanoff, 2002) found that patients who experienced humour from their doctors filed fewer lawsuits against them.

In another study, Sala, Krupat and Roter (2002), investigated the extent to which various types of humour, as used by both patients and doctors (such as light, tension-releasing and self-effacing), affected patient satisfaction levels during their visits. They found that, although patients generated humour slightly more often than their doctors, humour produced by each was "significantly greater" in high satisfaction than in low satisfaction visits and

that doctor-generated humour was consistent with positive rapport.

In an earlier study, Squier (1996; cited in Sala et al., 2002), found that humour reinforced a sense of equality between patient and doctor, helped develop a positive relationship and fostered a sense of control and healing for the patient.

More firmly rooted in the therapy room, meanwhile, Banmen (1982) stated, "humour breaks the ice between therapist and client . . . allows a therapist to be more human, minimising the therapeutic distance which too often exists between therapist and client." (p84).

In one study, Labrentz (1973; cited in Saper, 1987) found that humour had a positive impact on the initial client-therapist relationship whilst, in another study, (1974; cited in Banmen 1982), he exposed clients to four conditions (one of them humorous) before an initial therapy session. Those on the receiving end of the funny stuff rated the relationship with their counsellor significantly higher than those in the other three groups.

Hubert (1974, cited in Saper, 1987), found that therapist-introduced humour had a positive effect on both the client's perception of the relationship and their levels of discomfort.

But, can humour have a positive affect on emotions, behaviours and symptoms? Enough research seems to think so.

Lefcourt (2002), using two scalar measures developed earlier in Martin and Lefcourt (1984; cited in Lefcourt, 2002), found that humour had a moderating effect on stress.

The Situational Humour Response Questionnaire (SHRQ) asked people how often and to what degree they used humour in situations that could be as irritating as they might be amusing (ranging from not being amused at all to laughing out loud), while the Coping Humour Scale assessed their deliberate use of humour to alter difficult circumstances.

The series of studies supported the hypothesis that people with a good, as compared to a poor, sense of humour took both themselves and their life experiences less seriously and had a predicted effect on laughter during interviews, self-esteem, positive mood, mirth expressed during failed experiences, funny comments produced simultaneously during tests of creativity and more.

The results, however, were sex-specific. As Lefcourt (2002) noted, "The SHRQ seems to be more predictive of male humour, whereas the CHS is more predictive of female behaviour. These sex specific findings have also emerged in subsequent research." (p151).

Later, Porterfield (1987; cited in Lefcourt, 2002), used the SHRQ and CHS and found that while elevated humour was associated with lower scores on measures of depression, no interactions were found between humour and stress in the prediction of depression, indicating humour as a correlate, but not a moderator of moods displayed during stressful situations.

However, Nezu, Nezu and Blisset (1988; cited in Lefcourt, 2002), again using both the CHS and the SHRQ, found significant effects and interactions between stress and humour in the prediction of depression.

In another study, Kuiper and Martin (1993) investigated the relationship between a sense of humour and cognitive appraisals and reappraisals of a potential stressful event, namely an exam.

The authors found that students with high scores on the coping humour scale appraised the exam as a more positive challenge than the low humour students. And, according to Kuiper and Martin (1993), "in their reappraisals, high humour subjects ratings of importance and positive challenge were positively related to performance on the exam, whereas for low humour subjects this relationship was negative." (p81).

Also, in predicting performance on the next exam, the high humour people adjusted their expectations based on performance in the previous exam, while the low humour people did not. Finally, humour was negatively related to both perceived stress and dysfunctional standards for self-evaluation.

However, not all studies found the same affects of humor on stress. Safranek and Schroll (1982; cited in Lemma 2000 and Gelkopf & Krietler, 1996), found that neither humour use nor humour appreciation moderated the effects of the life events on depression, while Anderson and Arnoult (1989; cited in Lemma, 2000) found that it did not exert any effect on depression in the face of stressful situations.

But, Thornson, Powell, Sarmany-Schuller and Hampes (1997; cited in Lemma, 2000), developed a new humour scale and found it positively correlated to optimism and self-esteem and negatively with depression.

Rim (1988; cited in Sultanoff, 2002) found humour positively correlated with particular coping styles and Danzer, Dale and Klions (1990, cited in Gelkopf and Krietler, 1996) found that exposure to humorous audiotapes decreased depression.

And Witztum, Briskin & Lerner (1999) found that humour, combined with drug therapy led to positive changes in symptoms for chronic schizophrenia patients.

They developed a form of persuasion therapy, based on REBT, that used logical arguments as its basis. They subjected patients to either this or humour therapy. While the logical arguments group did not record visible improvement, the same humour therapy group did.

According to Witztum et al. "This approach appealed to them, raised self-esteem; and they likewise gained confidence in their own ability to form judgments. The fact that humour made an impact on the patient's cognitions demonstrated that patients with disturbed thought processes could be influenced in ways which improved coping." (p233).

Laugh, and the world laughs with you; weep, and you weep alone, as the saying goes. And there may be some scientific truth to this age-old bon mot. Bonanno and Keltner (cited in Lefcourt, 2002), found that bereaved people who smiled and laughed as they talked about their nearest, dearest and recently departed were judged more attractive and appealing than those who remained solemn. They found that people who laughed about difficult or dreadful experiences became more approachable.

Meanwhile, Nezu, Nezu and Blisset (1988; cited in Lemma, 2000), Richman (1996, cited in Sultanoff, 2002), and others, all found that a sense of humour was positively correlated both with increased social support and being liked by others.

Lemma (2000) noted that interpersonal support is critical in recovery from depression, while Sultanoff (2002) stated: "As individuals experience humour, they feel emotionally lifted and connect well with others." (p117).

Thorson, Powell, Sarmany-Schuller and Hampes (1997; cited in Sultanoff, 2002) found that people who experience distress tend to withdraw and disengage from relationships and opportunities, whilst individuals who experience humour become more energized and attentive and pursue connections with others, thus changing their behaviour.

Humour can also have an impact on views of self-worth and self-efficacy.

According to Overholser (1992; cited in Gelkopf & Krietler, 1996), high scorers on the coding humour scale have higher self-esteem and Martin, Kuiper, Olinger and Dance (1993; cited in Gelkopf & Krietler, 1996) noted that higher levels of humour, "are related to a more positive self-concept, assessed by actual-ideal discrepancies, self-esteem and standards of self-worth evaluation." (p242).

Darmstadter (1964; cited in Banmen, 1982) and Goldsmith (1973, cited in Banmen, 1982), both found positive correlations between humour ratings and psychiatric patients ego-strength levels.

Kavanagh & Bauer (1985; cited in Lemma, 2001) and Salovey (1987; cited in Gelkopf & Krietler, 1996) found that humour contributed towards increased feelings of self-esteem, a sense of self-efficacy and more enjoyment of events and activities. And Schiffenbauer (1974; cited in Gelkopf & Krietler, 1996) found humour strengthened the enjoyment and pleasant-

ness of objects, activities and events.

If you want to gauge a person's levels of self-esteem, pay them a compliment; if you want to gauge their levels of mental health, tell them a joke.

Several theorists, including Bader (1993), Banmen (1982), Birner (1994), Derks, Lewis and White (1981) – who discussed comparisons of ration and category scales of humour – McGhee & Goldstein (1993a), Prerost (1989), Salameh (1983) – who even developed his own five-point humour rating scale for assessment purposes – Streaun (1994), Sultanoff (2002) and many others have all argued that humour can be used as a diagnostic tool.

Goodman (1983) reports that many psychiatrists ask patients to tell them their favourite joke as a way of getting to their client's inner thoughts, while Barnett and Apostolakos (1954, cited in Banmen 1982) used cartoons for a similar purpose.

Dryden (2001) quite often tells jokes to gauge his patient's humour quotient (likening it to an analyst making trial interpretations), and then adjusts his humour delivery accordingly.

And Harrelson and Stroud (1967; cited in Banmen, 1982) found that patients who displayed hostile, distant humour in their early therapy sessions, replaced it with non-hostile, warm humour in later stages.

So, if what research there is suggests that humour is an effective therapeutic change tool, it could also be argued that it is, therefore, a desirable condition. However, with such a small amount of empirical testing in psychotherapy generally and next-to-nothing in REBT specifically, humour appears as a rich seam, ready for the scientific plundering.

Call for research

As Dryden and Branch (2008) have noted, REBT posits humour as a desirable core condition, alongside empathy, unconditional acceptance and congruence.

But is this indeed the case? Do REBT therapists consider it a desirable quality and/or condition? If so, how many think that and how many actually use humour in their sessions?

This article suggests research to build on the work of Sala et al. (2002) who investigated the use of patient-doctor humour, and Lemma (2000) who asked 20 psychoanalytic therapists if they used humour (60 per cent said they did, but 80 per cent of those said they would be reluctant to share such interventions with their supervisors) by approaching 100 REBT therapists and assessing their use of humour through a series of five-point Likert scale items.

Ranging from strongly disagree to strongly agree, the items could include the following:

- Humour is a desirable therapeutic core condition in REBT
- Humour is a desirable quality for therapeutic change
- Humour is an important part of your practice

Humour is a regular part of your practice

This paper also proposes asking the therapists for several examples of humorous interventions and their outcomes. The therapists would then be asked to rate their use of that humour according to Salameh's (1983) five-point humour rating scale (which ranges from destructive to outstandingly helpful).

However, therapy is not about the therapist, but about the client. No matter what REBT posits about the use of humour, it's not worth using if the clients don't like it. Again, building on the work of Sala et al. (2002) and Banmen (1982), this paper proposes a study on the use of humour in REBT as experienced by the client. It suggests contacting 100 clients who have received REBT with humour and sending them questionnaires. Again, using Likert scale items and, again, incorporating Salameh's (1983) humour rating scales, these would include the following:

- You received humour in your REBT sessions

- You enjoyed the use of humour in your REBT sessions
 - You did not enjoy the use of humour in your REBT sessions
 - The use of humour enabled you to build a positive working relationship with your therapist
 - The use of humour made for a negative working relationship with your therapist
 - You liked the therapist more for his use of humour
 - You liked the therapist less for his use of humour
 - Humour improved your understanding of certain aspects of REBT
 - Humour helped you work on your problems
 - Humour did not help you work on your problems
- Humour helped you to affect a change on your beliefs

And from Salameh (1983):

- You consider the use of humour in your therapy to be destructive
 - You consider the use of humour in your therapy to be harmful
 - You consider the use of humour in your therapy to be minimally helpful
 - You consider the use of humour in your therapy to be very helpful
- You consider the use of humour in your therapy to be outstandingly helpful

There have been several studies that have assessed the effects of humour on cognition but, can humour affect those specific cognitions (unhealthy beliefs) that REBT places at B in the ABCDE model of psychological health?

This article proposes two experiments to directly assess humour's effects on a person's beliefs at B.

These studies not only build on the work of Lefcourt (2002) and Kuiper and Martin (1993) in studying the affects of humour on stress, but also Porterfield (1987; cited in Lefcourt, 2002) and Nezu et al. (1988; cited in Lefcourt, 2002), who studied the effects of humour on depression.

The study into anxiety proposes a sample of 100 people who are about to experience a real-life stressful event (for instance, a driving test). After testing for anxiety, via the Beck Anxiety Inventory (BAI), the subjects would be randomly allocated to one of four groups: REBT (one group with a humorous slant, the other without); another group to receive simply "humour" in the form of funny films to watch in lieu of therapy and one group on a waiting list as a control.

The subjects would be handed the SHRQ and CHS questionnaires developed by Martin and Lefcourt (1984; cited in Lefcourt, 2002) as well as a series of questionnaires detailing REBT-specific statements such as "I absolutely must pass my driving test," and "I would prefer to pass my driving test, but I don't absolutely have to pass my driving test," together with statements concerning unhealthy and healthy derivative beliefs, such as awfulising, anti-awfulising and so on, plus other anxiety and healthy concern-related beliefs based around performance and asked to fill them out before the test and before the therapy/humour and then before the test but after the therapy/humour (at which point they would also re-receive the BAI) with the prediction that REBT delivered with humour will have had a significantly greater impact on altering the client's unhealthy beliefs.

Building on the work of Safranek and Schriell (1982; cited in Gelkopf & Krietler, 1996) and Anderson and Arnoult (1989; cited in Lemma, 2000), the study on depression would be similar, but without the use of an "event" such as the driving test. A sample of 100 people suffering from depression would be offered REBT. After being tested for depression via the Beck Depression Inventory (BDI), they would be randomly allocated to one of four groups: two

groups of REBT (one with a humorous slant, the other without), a group given humorous films to watch in lieu of therapy and a waiting list as a control.

The participants would be given the SHQA and CHS, as well as questionnaires detailing RECBT-specific belief statements dealing with depression, and asked to fill them out before the therapy/humour and again after the therapy/humour (at which point they would also re-receive the BDI). The prediction is that REBT delivered with humour will have had a significantly greater impact on altering the client's unhealthy beliefs about depression.

The final study proposed by this article focuses specifically on self-worth. Can REBT delivered with humour have a greater effect on specific unhealthy beliefs centred around self-damning (as in "I am useless", or "a failure", or "totally without worth" and so on) and help affect a shift to their healthy counterparts (as in, "I am not totally worthless or useless, I am a worthwhile but fallible human being.")

This would build upon the work of Overholser (1992; cited in Gelkopf & Krietler, 1996), Goldsmith (1973, cited in Banmen, 1982) and others, who all found positive correlations between humour, a sense of self-worth and feelings of self-efficacy.

This experiment would sample 100 subjects (50 male, 50 female, from various backgrounds, of various ages), who have all reported feelings of inadequacy and low-self worth and randomly allocate them to one of three groups: REBT with humour, REBT without humour, and a waiting list as a control.

Again, the participants would be given a series of questionnaires/self-report measures, centred around notions of self-damning and self-acceptance, given six sessions of therapy, with the measures being filled out before and after. The predicted result being that humour-led REBT would have a greater impact on statements of unconditional self-acceptance than REBT without humour.

Conclusion

The aim of this article was to discuss the research that exists on the use of humour in psychotherapy and to suggest future research into its use in REBT.

The research that exists, though sparse, appears to support the notion that, as long as its use has a therapeutic end-point, humour is both an effective and desirable quality in psychotherapy generally and REBT specifically.

Like Ellis (1977), Sultanoff (2002) argues that, "humour in psychotherapy can be particularly powerful because it has the potential to activate changes in all four of the core aspects of the human experience (emotional, behavioural, cognitive, and physiological) that are targeted by the major theoretical approaches." (p140).

Albert Ellis often said that people disturb themselves, not just by taking themselves seriously, but by taking themselves too seriously and stated (1977) that, "if neurotics take themselves, others and world conditions too solemnly, why not poke the blokes with jolly jokes? Or split their shit with wit? (p2).

It can be argued that REBT is crying out for some shit-splitting scientific research.

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Biography

An REBT practitioner and clinical hypnotherapist, Daniel Fryer, runs private practices in Central and South West London, and holds clinics at the Royal Brompton Hospital (where he specializes in the treatment of Cardiac Syndrome X, angina and their associated psychological symptoms) and in the occupational health division of Medicentre (where he specialises in work-related stress management).

He has written articles for *Lighter Life* and other magazines and has been interviewed in articles for *Diva*, *Body Matters* and the *Metro* newspaper.

Accreditation Matters

Report to members from the accreditation director

Dear accredited and non-accredited members of AREBT,

I am happy to announce that since September 2011, AREBT and BABCP have had a joint REBT/CBT accreditation standard and procedures. Our joint national accreditation office (based in the BABCP office in Bury) is now assessing all our new and re-accreditation applicants.

All our new applications for accreditation with the AREBT, as well as applications for re-accreditation with us, will first be sent to my office at 10 Hammond Close, Stevenage, SG1 3JQ, and after an examination and registration the applications will be posted to the national accreditation office in Bury. Once received, the office will pass the applications to the AREBT assessors for examination. When the assessors have finished their examination, the applications will be posted back to Bury, where the accreditation certificates will be issued and posted to the successful applicants. As soon as an applicant has been accepted as an accredited therapist (provisional or otherwise), he or she will have the right to be listed on the CBT Register UK.

Those of us who are already accredited with AREBT and wish to have the dual accreditation, will have to post a new application, which will need to meet our new standard. Conversely, anyone who is first accredited with the BABCP and has enough training and supervision in REBT (i.e. 50 %) can also have the dual accreditation once he or she has posted a new application to the AREBT.

As from this month, anyone who applies for accreditation with the AREBT and is an accredited member of the two organisations will be able to have a dual accreditation without having to post any new applications.

The AREBT and the BABCP are now working hard to promote our accreditation system as an indicator of good and accountable CBT practice in the UK. We are also aiming to promote the CBT Register UK as the best indicator of well-trained and accountable REBT/CBT Therapists in this country.

We all know that due to the lack of regulation in the psychotherapy/counselling field in the UK, any psychologist, psychotherapist or counsellor can market himself or herself as a CBT practitioner, even if they have little or no training at all in REBT/CBT. We hope that by accrediting our well-trained REBT/CBT practitioners, we will be able to assist the public with their choice of recruiting or employing accountable REBT/CBT therapists for themselves or for their organisations.

May I thank Irene Tubbs, who has worked so hard in the last two years to help me with my negotiations with the BABCP on behalf of the AREBT and has helped us to get the new accreditation standard, which I hope will benefit our members with their careers.

Meir Stolear

AREBT Director of Accreditation

The Rational Emotive Behaviour Therapist 2011

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INFORMATION FOR CONTRIBUTORS

The Co-Editors welcome research findings, REBT practice demonstrated through descriptions of case studies, or group sessions, etc., theoretical studies, considered responses to published articles or current issues, reports of experiments, any news, views, ideas, letters and information about new publications or activities, research needs, and training.

Three copies of the manuscript must be submitted. Manuscripts must be typed on one side of a sheet of paper, double spaced (including references, quotes, tables, etc.) with 1 inch margins. No article can exceed 4,000 words, without prior agreement from the Editors, and each manuscript must include a word count at the end of each page and overall.

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THE ASSOCIATION FOR RATIONAL EMOTIVE BEHAVIOUR THERAPY

Aims:

- To promote and develop the science of Rational Emotive Behaviour Therapy (REBT)
- To maintain a register of members
- To maintain a register of accredited practitioners
- To promote the interests of the members of the Association in their professional activities
- To publish a journal for the academic and professional advancement of Rational Emotive Behaviour Therapy
- To publish a Newsletter and/or other literature and maintain a website for the purposes of distributing information and advancing the objects of the Association and keeping members and others informed on subjects connected with REBT
- To recognise or accredit training courses and/or institutions
- To run training events and conferences for the purpose of continuing professional development of members and other professionals
- To carry on all such activities as may be conducive to the aforementioned aims

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