Mindfulness and mindfulness meditation as coping skills for stress management

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PSY514 Assignment 1
August 2000

Health psychology is a growing field. Basically Health Psychology is related to understanding the psychological factors and influences that maintain health. It is also devoted to understanding why people become ill and how they may respond and cope when they become ill (Milgrom and Hardardottir, 1995). "Health" and "illness" are very broad concepts that involve many different mental and physical areas as well as ways to manage and overcome distress. As "stress" strongly influences mental and physical well being, stress and coping with stress or stress management together have become very important components of the Health Psychology field. One approach that is becoming popular in the stress management area is "mindfulness". The practice of mindfulness, as it is understood in stress management, is however not a new approach. This approach has been described in detail in Buddhist meditation practices that have been prevalent for over 2500 years.

The following essay will consider and explain how mindfulness is an adaptive coping mechanism for stress. It will explain the function and role of mindfulness in this area. The explanation will incorporate reference to Buddhist psychology as well as some reference to contemporary psychological approaches. Initially stress, stress management, coping and mindfulness will be defined. This will be followed by clarification of a strategy used to help develop mindfulness and then a brief review of some of the literature related to mindfulness and stress management. Finally, an overview of the principles of Buddhist psychology and philosophy will be presented to help conceptualise the role and function of mindfulness in coping with stress.

Stress

Initially the term stress was an engineering term and it was in the later half of the 20th century that it gained physiological and psychological significance.

Like the word love, stress is a concept that most people feel they understand. However, it can refer to a range of phenomena and there is not a universally agreed upon definition for this term (Rice, 1987; Steptoe, 1997). In the psychological literature most definitions for stress are encompassed within the following three models:

1.Stress may refer to a stimulus (such as difficult or traumatic events in ones life) (Hobfall, 1989).

2/Stress can also refer to a response. For example, Hans Selye originally defined stress as a non-specific response of the body to any demand (Selye, 1984).

3/Stress may also denote an interactive process between stimuli and responses.

The transactional models referred to in 3/ above are perhaps the most comprehensive models because they involve stimulus, response as well as other contextual factors such as feedback processes, the nature of the individual and how cognitive appraisal may alter both the nature of events and possible responses.

One transactional definition of stress is *the process that occurs when demands (actual or perceived) are greater than coping capacities (actual or perceived) and as a result physical and or mental/emotional distress arises.* (Trumbell and Appley, 1986).

The transactional models of stress acknowledge that different people may respond differently to similar events and that the stress response may be multi-dimensional involving cognitive, affective, behavioural and physiological changes and distress (Steptoe, 1997).

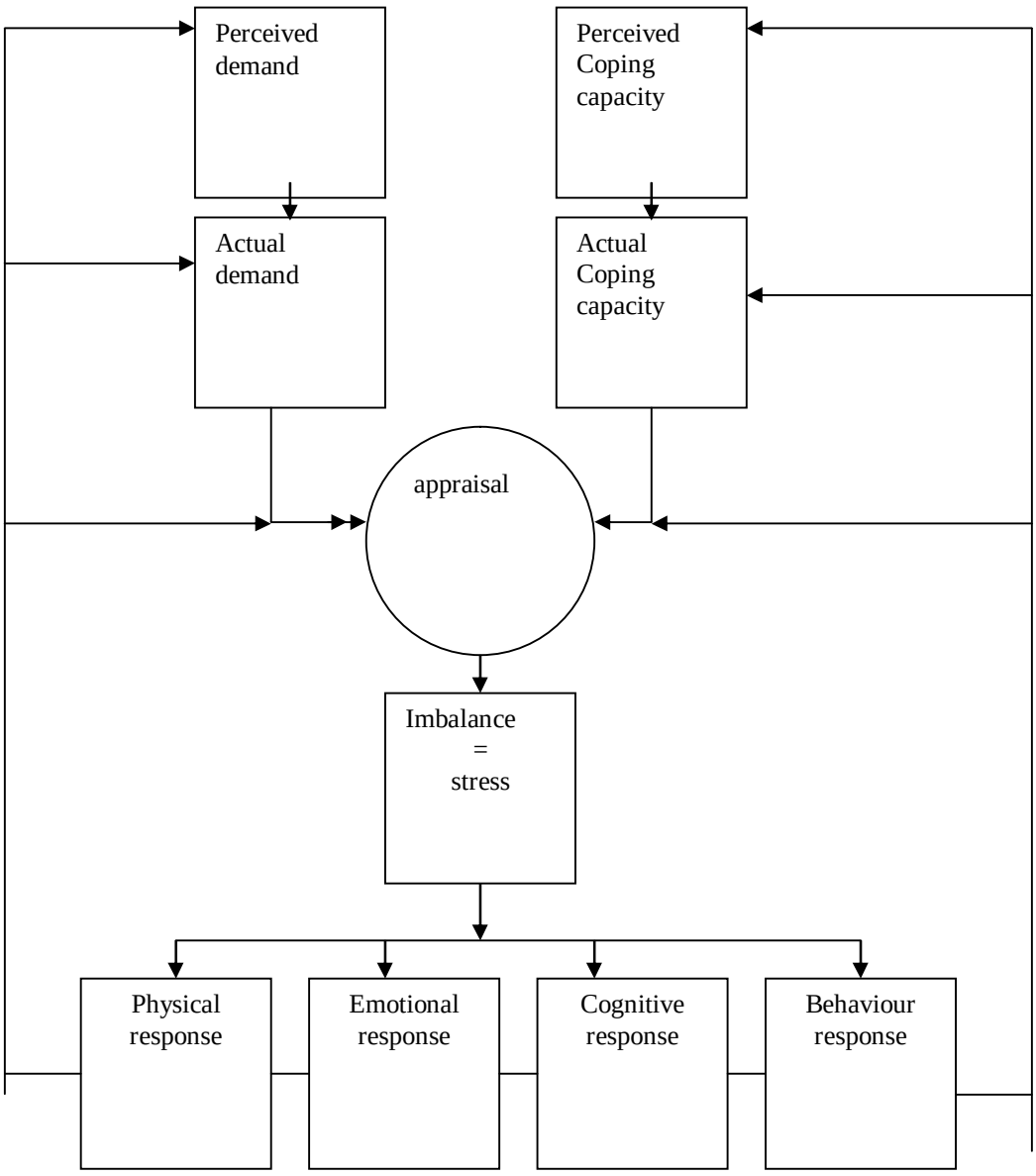
Stress can precipitate numerous cognitive/emotional, behavioural and physical reactions that may be interconnected and related. At a physical level stress may be involved in a complex sequence of autonomic, endocrine and biological changes that may be distressing such as increased blood pressure,

muscular tension, sweating, diarrhoea, and nausea. Stress can also reduce immunity to further disease (Bachen, Cohen, and Marsland, 1997). All the physiological conditions that have been related to stress are too numerous to mention. However, some common conditions include: headaches, migraines, premenstrual tension, allergies, skin eruptions such as psoriasis and herpes, aches and pains and asthma (Selye, 1984).

Stress, as defined above, could also be considered a precipitating and perpetuating factor in many major psychological disorders including: the anxiety disorders such as Generalised Anxiety Disorder or Post Traumatic Stress Disorder (Emmelkamp, Bouman & Scholing, 1992), the mood disorders such as depression and bipolar disorder, and psychotic episodes in the psychotic disorders (Falloon, Laporta, Fadden and Grahan-Hole, 1993).

Figure 1 on the next page below is a diagram of one transactional model of stress. This diagram shows how stress responses may further impact upon demands as well as how these demands are appraised. For many, stress can become a worsening cycle of distress and suffering.

Figure 1, Transactional Model of Stress (adapted from Cox, 1978, p.19)



Stress as a process where perceived or actual demands are appraised as outweighing perceived or actual coping capacity and as a result distress arises.

Coping

Coping generally refers to the way one deals with demands. In the stress literature coping has been defined as “constantly changing cognitive and behavioural efforts to manage specific and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus and Folkman, 1984, p.141)

Lazarus and Folkman (1984) differentiated coping as either emotional focused or problems focused. Problem focused coping strategies usually act upon the source of the stress and change it in some way. They may redefine a problem, generate solutions and weigh up alternative solutions. They may also be directed at the environment or oneself by developing new behaviours or skills. Emotional focused coping, on the other hand, is generally considered as efforts to palliate and regulate dysphoric emotional states that are associated with or connected to the stress.

Both coping styles may be maladaptive or adaptive depending upon the circumstances. With chronic illness, for example, the emotional focused approach of reframing and accepting the disease has been associated with positive outcomes. Whereas avoiding (another emotional focused strategy) has been associated with increased distress and disability (Petrie and Moss-Morris, 1997). Trying to change the situation with problem focused strategies have generally not had positive outcomes with chronic illness. On the other hand seeking out information about the illness and planning (other problem focused strategies) have had positive outcomes in terms of distress and disability (Petrie and Moss-Morris, 1997).

Problem and emotional focused coping may, at times, not be differentiated. In addition problem focused and emotional focused coping strategies may interact with and support each other. For example, distancing oneself from intense emotional reactions (emotional focused) during a crisis may provide the mental clarity to think through and initiate practical responses (problem focused).

Stress Management

Stress management and developing adaptive and functional coping mechanisms and skills could be considered synonomous. The aim of stress management is to intervene the cyclic process of stress by:

1. Ameliorating the distress of the stress response and/or
2. Dealing with other aspects of the stress process such as reducing the demands, changing perceptions, enhancing coping capacity, altering appraisal, short circuiting feedback loops and generating appropriate coping strategies so that the distress does not arise (Lazarus and Folkman, 1984).

Stress management approaches popularised in books or "stress management" courses may have a variety of components. The nature and variety of these components vary dependent upon the theoretical orientation of the approach and the particular nature of stress they are directed at.

Books based on Cognitive Behavioural approaches to stress (eg Davis, Eshelman and McKay, 1988) for example, may include both problem and emotional focused components such as :

- Time management
- Relaxation
- Learning Problems solving skills
- Self hypnosis
- Assertiveness training
- Nutrition
- Refuting irrational ideas
- Meditation

Mindfulness or *satipatthanna*

Mindfulness is an emotional focused coping skill, a way of being as well as a meditation practice. Meditation is one coping skill that is often included in

stress management approaches. However, meditation may have many meanings. In a broad sense “it is the practice of uncritically attempting to focus your attention on one thing at a time” (Davis, et al., 1988, p.37).

There are many different types of meditation practices and objects to focus attention upon. Some Buddhist taxonomies highlight 40 different types of meditation practices (Goleman,1975). Often meditation practices involve paying attention to a single object such as a mantra. This is done in an effort to exclude distractions from the object. These types of practices usually develop concentration, calm and physical relaxation. Mindfulness meditation practices, however, are very different. With mindfulness attention is directed towards changing objects or conditions of mind and body. Thus, “distractions” also become the objects of attention. The primary aim of mindfulness meditation is to produce insight about the conditional nature of ones life. Concentration, a sense of calm, and relaxation, however, can also results from these meditations.

Mindfulness meditation practices are particularly dominant in the Zen and Theravadin traditions of Buddhism. In the Theravadin Buddhist traditions mindfulness meditation has been called *satipatthana vipassana*. *Satipatthanna* is a compound word derived from an ancient Indian language called Pali that was used by Gotama the Buddha about 2500 years ago. *"Sati"* means awareness and it can also mean memory. In the context of *satipatthanna, sati* usually means attention. "*Patthana*" means keeping present and foundation. The “*patthanna*” of *satipatthanna* refers to where the attention is directed. (Nyanapondika Thera, 1962; Kearney, 2000) Thus, *Satipatthanna* refers to remembering to deliberately place attention or turn the mind to what is happening right now.

Vipassana translates as insight, where *vi* denotes separate and *passana* means seeing clearly. Therefore *vipassana* means seeing separately and seeing distinctly (Kearney, 1995). *Vipassana* results from practicing *satipatthanna*.

Sati or satipatthanna is usually translated as mindfulness. However, this translation may not be adequate. In the English language mindfulness can refer to a number of mental activities including: remembering, being attentive to, reflecting upon, being aware of, bearing in mind, keeping in mind, monitoring, looking upon, knowing and thinking about. *Sati* or *satipatthanna* may encompass some of these meanings but it does **not** mean *thinking about* or *reflecting upon.* In addition, the term mindfulness does not capture the temporal quality of *satipatthanna*. The practice of *satipatthanna* is centred in the present moment. To avoid confusion, from here on "mindfulness" refers to *sati* or *satipatthanna* and these terms may be used interchangeably.

According to some definitions (eg Fryba, 1987, p.4) " mindfulness (*sati*) is more than just attention and perception . *Sati* consists of continual noticing, of non selective apprehension of real processes and of recollection of what has taken place. Mindfulness always relates the entire field of our experience of reality here and now."

Sati has also been defined as "the clear and single minded awareness of what is happening to us and in us at successive moments of perception" (Nyanapondika Thera in Goleman, 1988, p.21).

Sati is the act of being fully aware of, knowing and attending to, experience as it occurs in the present moment. Put simply *sati* or *satipatthanna* refers to present centred awareness, detached observation (Nyanaponika, 1962), bare attention (Goldstein, 1976) or just being here now (Dass, 1972).

Linehan (1993) in reference to developing Zen Buddhist mindfulness as a coping skill for Borderline Personality Disorders (BPD) described the "what" and "how" of mindfulness. Mindfulness was explained as *observing*, *describing* and *participating* with experience and it should be done a manner that is *non-judgmental, focused* (or one thing at a time) and *skilful*.

Attitudes of non-judgment, acceptance, patience, non-striving, a beginner's mind and letting go are, according to Kabat-Zinn (1990) essential to the practice of *satipatthanna*. These attitudes, however, are an integral part of mindfulness and develop as one becomes more familiar with this practice, skill and way of being.

Non-judgement, does not imply one should not utilise discriminating wisdom but for the practice of mindfulness it generally refers to suspending the filter of evaluating comments so that objects of mindfulness can be perceived as they are (Linehan, 1993). Similarly, acceptance does not refer to apathetically condoning dysfunctional patterns rather it means "seeing things as they actually are in the present" (Kabatt-Zinn, 1990, p.38).

Though not described in a Buddhist context the goal of "Acceptance and Commitment Therapy" is acceptance. In this therapeutic approach acceptance refers to:

> "the willingness to experience a full range of emotions, thoughts, memories, bodily states, and behavioural predispositions, without necessarily having to change them, escape from them, act on them or avoid them" (Hayes, 1995 cited in Paul et al.,1999, p. 150).

The domains of *satipatthanna*

In traditional Buddhist teachings there are four areas or domains of mindfulness These are mindfulness of body, feelings, mind states and mind objects (Nyanapodika Thera, 1962).

1. Mindfulness of body includes, among other aspects, being aware of postures, somatic sensations and the breath.
2. Mindfulness of feelings is not regarded as mindfulness of the emotions as such, but more being attentive to the qualities of pleasantness, unpleasantness and neutrality which arise in the mind with relationship to sensory perceptions or mental processes.

3. Mindfulness of mind states refers to being attentive to the states of mind that may colour the mind such as a distracted mind, an angry mind, a happy mind, a guilty mind and so on. Being mindful of emotions as we normally understand them could be included in this domain.
4. Mindfulness of mental objects refers to being aware of phenomena in general. Included in this domain is awareness of the content of mind such as thoughts and how they may condition both physical and mental processes (Nyanapondika Thera, 1962)

Mindfulness in contemporary psychotherapeutic paradigms

The practice *of sati* or *satipatthanna* is not limited to Buddhism. This activity or elements of *satipatthanna* may also be found in many different contemporary psychological paradigms often under different names such as:

- *self monitoring* in Behavioural Therapy (Mahoney and Thoresen, 1974),
- *being in the now* in Gestalt Therapy (Pearls, 1970),
- *present centeredness* in Gestalt therapy (Naranjo, 1970),
- *listening to oneself* in Client Centred Therapy (Rogers, 1962),
- *listening to automatic thoughts* in Cognitive Behavioural Therapy (McKay, Davis and Fanning, 1981),
- *self awareness* in Emotional Intelligence (Salovey, Bedell, Detweiler and Mayer, 1999),
- *meta-mood* and *meta-cognition* (Goleman, 1995),
- *free association* and *hovering attention* in Psychodynamic therapy (Epstein, 1995; Speeth, 1982), and
- *acceptance* in Acceptance and Commitment therapy (Paul, Marx and Orsillo, 1999).

In some contemporary psychotherapeutic interventions the practices of *satipatthanna* have been directly adapted from Buddhist traditions. Dialectical Behaviour Therapy (DBT), for example, is one of the few empirically validated approaches for the treatment of BPD (Linehan, 1993). Mindfulness is the key coping skill that is taught within this treatment approach.

Mindfulness strategies.

There are many specific strategies, techniques and approaches that are used in mindfulness training. One strategy that is used to develop mindfulness is that of “noting” or labelling, in a sub-vocal manner, objects of mindfulness with a name.

Like the expression of feelings and thoughts used in Gestalt therapy, 'noting' serves to concentrate the mind as well as clarify and objectify the condition. Noting can be used in formal sitting or walking meditation practices or it can be used in one’s daily activities or busy work life as attention focuses upon whatever is predominant. For example, attention to the rising and falling in the abdomen while breathing can be labelled "rising, falling", thoughts of the past can be labelled "remembering", the future, "planning". Emotional tendencies can be identified and labelled appropriately such as "anger", "worrying", "fear", “sadness" or even “joy” “peace” “excitement” etc. Actions also can be labelled accordingly. One may, for example, use the note "brushing" for brushing one's teeth, or “reaching” for reaching for a door handle. It must be emphasised that “noting” is only a tool used to develop mindfulness and if it becomes redundant or functions as an obstacle it should be ceased

The need to develop distinctive clarity about the nature of the objects of attention in mindfulness has been emphasised by meditation teachers as well as the literature about Emotional Intelligence. Emotional Intelligence is a way of understanding how individuals cope. According to Salovey et al., (1999, p. 141) Emotional Intelligence involves:

> “The ability to monitor one’s own and others’ emotions, to regulate them, and to use emotion-based information to guide thinking and action”

Emotional Intelligence has been equated with an individual's ability to cope successfully and "rebound" from stress (Goleman, 1995). Self awareness is one key factor in emotional intelligence but it may need to be done in a manner that resembles mindfulness as defined in this essay. If "self awareness" is practiced in a manner that is more akin to "thinking about" then, in some individuals, it could be a threat to emotional health.

For example, studies have shown that rumination or "passively and repetitively focusing upon one's symptoms of distress and the circumstances surrounding those symptoms" (Salovey, et al., 1999, p. 147) has been correlated with increased depressive symptomatology. In addition, mood monitoring where one tracks the progress of one's mood with general awareness may not always be helpful. However, research indicates that individuals who are able to label and distinguish moods and feelings with clarity are more likely to "rebound" from stressful circumstances. Gaining clarity and labelling emotions are thus considered the first steps to short circuiting and disengaging from depressive ruminative coping cycles (Salovey, et al., 1999).

In the Theravadin Buddhist tradition meditation masters explain that a distinctive characteristic of mindfulness is "non-superficiality" where perception is penetrative. Non-superficiality is compared to a stone thrown into a stream. It sinks to the bed. Superficial awareness, on the other hand, has been compared to a cork being thrown into a stream. It gets carried away with the flow (Sayadaw U Pandita, 1992). Superficial awareness, like rumination, has the danger being caught up in the stream of thinking processes rather than distinctly perceiving and labelling body as body, thoughts as thoughts, feelings as feelings, and mind states as mind states.

Like any emotional coping skill, mindfulness is not a panacea for all of life's stressful woes and, as indicated above, if misunderstood and practiced incorrectly may lead to problems. Word restrictions in the present essay limit more elaborate explanations of how mindfulness is practiced and possible

dangers that may be encountered. However, one danger that should be mentioned is that some vulnerable individuals who attempt mindfulness practices in an intensive manner (such as on silent retreats) and who are not adequately guided may begin to feel a sense of fragmentation. This can lead to depersonalisation, de-realisation and disassociation (Epstein, 1990). If uninitiated individuals practice mindfulness in an intensive manner they should be guided by a skilful teacher.

Empirical support for mindfulness in stress management programs

Stress management, as defined above, is not distinguishable from many psychotherapeutic interventions. Like Linehan (1993) some psychologists have also directly adapted Buddhist mindfulness practices to stress management programs that may reduce the distress of problems found in the health psychology field such as anxiety, depression, pain and illness/disease (Kabat-Zinn, 1990). Many of these programs have been termed Mindfulness-based stress reduction (MBSR) (Muirhead, 1999)

For example, Kabat-Zinn, Lipworth, and Burney (1985) described how ninety chronic pain patients, in separate groups, each attended a 10-week, 2 hour per week "stress reduction and relaxation program" where they were trained in mindfulness meditation. Pre, post and follow-up evaluation measures included the Symptom Check List 90 Revised (SCL-90R), the Profile of Mood States (POMS) pain measures and measures of homework compliance. These patients showed statistically significant reductions in present-moment pain, negative body image, inhibition of activity by pain, use of pain relief medication, anxiety and mood disturbance including depression. Feelings of self esteem and general activity levels increased. The improvements were maintained on all measures except for present-moment pain at 15 month follow up.

In another study Kabat-Zinn, Massion, Krieteller, Peterson, Fletcher, Pbert, Lenderking and Santorelli (1992) showed how 20 of 22 subjects who fulfilled

criteria for GAD or panic disorder with or without agoraphobia demonstrated significant reductions in symptoms as measured on scales including the Beck Anxiety Inventory, The Hamilton Rating Scale for Depression and the Beck Depression Inventory. Changes were maintained at 3 month follow up evaluations as well as 3 year follow up for those who continued to practice the skills they learnt.

A MBSR program was run for female inmates in a Florida (US) state prison. The eight week program was compared to a wait list control and another group attending psycho-educational classes. The wait list subjects remained unchanged. The women in the two other groups demonstrated reduction in state anger and anger expression score between pre and post testing. However, only the women attending the MBSR program demonstrated significant increases coping with stress indicators and a significant reductions in global levels of distress (Perkins, 1999).

A search of the Psych-Info data base revealed numerous studies using variations of MBSR program for stress related conditions. The pre, post and follow up measures varied depending upon the condition and in some cases control or comparison groups were not used. However, in general the results favoured the use of mindfulness based stress reductions approaches for the reduction of stress related indicators.

The studies included:

- MBSR for coping strategies, fibromyalgia impact and attitudes towards fibromyalgia (Kaplan, Goldenberg, and Galvin-Nadeau, 1993);
- MBSR for effects upon psychological symptomatology, sense of control and spiritual experiences for undergraduate students (Astin, 1997);
- MBSR for stress reduction in medical students (Sharpiro, Schwartz and Tucson, 1998);
- MBSR in combination with light therapy for the treatment of psoriasis (Kabatt-Zinn, Wheeler, Light, Skillings, Scarf, Cropely, Hosmer and Bernhard, 1998).

- using mindfulness meditation to reduce binge eating (Kristeller, Hallett and Brenden, 1999);

It seems that the popularity and claims of health benefits from mindfulness practices have also extended to the business and sports domains Bushell (1997) for example offers five tips based on mindfulness practices such as walking mindfully and noticing emotions for real estate agents to maintain a healthy balance in their lives. In another example, Graham (1997), in the sports area, describes mindfulness as very different from meditation techniques such as Transcendental Meditation and recommends it to enhance a deeper sense of composure, integrity and clarity as well as athletic performance!

Empirical support

The term "empirical" has a number of meanings. At its most basic level empirical evidence is evidence that is based upon experience as opposed to theory (Reber, 1995). Empirical support for an intervention procedure can have a number of levels. Psychologists generally consider that evidence derived from controlled studies has a higher level of validity than evidence from uncontrolled studies. Nevertheless, the latter in the form of, for example, anecdotal reports are still relevant.

As noted in the studies above some higher level empirical support exists for the use of mindfulness practices with a variety of problems. However, another way to consider the empirical support for mindfulness is by analysing the impact this practice has had upon large populations who may have utilised it. The meditative practices such as *satipatthanna vipassanna* to promote mental health, for example, have survived thousands of years and continue to grow in popularity. It is claimed that Gotama the Buddha (founder of Buddhism) said that the practice that one chooses to reduce personal suffering must be based upon personal experience and not theory (Rahula, 1959). The continued popularity and support of practices such as *satipatthanna vipassana* could, to a large degree, be based upon individuals' personal experience and the

experiential validation that the strategies incorporated may improve a practitioner's quality of life.

The function of mindfulness

As mindfulness or elements of mindfulness may be used in numerous psychotherapeutic paradigms there may be many different explanations about how it operates. In Buddhist psychology there are numerous roles for mindfulness as it is used to extinguish, alleviate, and ameliorate the suffering related to stress. Two explanations found in Buddhist psychology are very similar to the processes of "reciprocal inhibition" and "extinction through exposure" that are often explained in Behavioural and Cognitive Therapies. In order to elucidate these processes a brief overview of the core principles of Buddhism is presented below.

The principles in which Buddhist psychology, philosophy, theory and practice are based are referred to as the "four noble truths". These truths are:

1. that there is unsatisfactoriness, or suffering,
2. there is an interdependent causality for suffering,
3. there is the possibility for freedom from suffering and
4. there is a way or a path to freedom.

The ultimate goal for Buddhists is absolute freedom which is called *Nibbana* (Pali) or *Nirvana* (Sanskrit). The four noble truths point to this absolute goal. However, according to Buddhist thought, they also describe the relative way mental and physical conditions interact. In this way they are relevant for the present discussion about stress.

Buddhist's assert, through their observations and experience that: all conditioned phenomena is impermanent; there is no "soul"; and no part of mind or body lasts. If all conditions are impermanent fulfilment and

satisfaction based upon these changing conditions cannot be found (the 1st noble truth).

Struggling and resistance to inevitable change and wanting things to be other than "the way things are" are interdependent factors (the 2nd noble truth) leading to suffering.

The tormenting, unsatisfactory, frustrating and generally distressing aspects of stress with all its interactive and interdependent components could be incorporated in the manifestation of the Buddhist 1st noble truth of suffering.

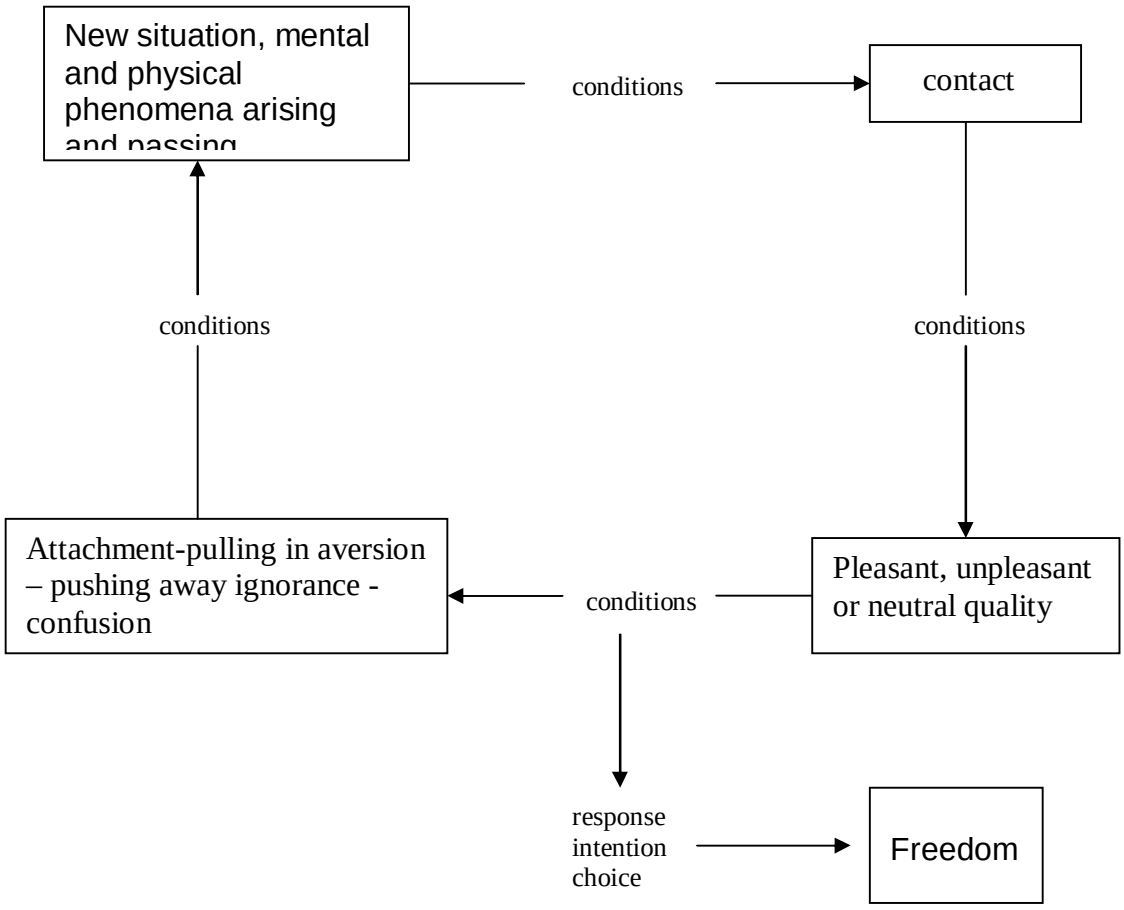
The root interdependent causes for suffering, according to Buddhism, are: attachment, aversion and ignorance. The pleasantness, unpleasantness and neutrality of feeling (as defined in the domains of *satipatthanna* above) are key elements in the reactive processes that condition suffering.

Fortunately, suffering is conditional and not absolute. Freedom from this suffering, both relative and absolute, is possible (the 3rd noble truth) but paradoxically this is a frame of mind that is content with things as they are. This "contentment" occurs by developing understanding and insight or "wisdom" and practicing according to this understanding (the 4th noble truth). The noble eight fold path is the essential practice of Buddhism and constitutes the 4th noble truth. The eight factors on the Buddhist path can be divided into three basic components: ethics or lifestyle ("right" or skilful action, speech and livelihood), mental development (right effort mindfulness and concentration) and wisdom (right understanding and thought or intention).

Figure 2 below represents the interdependent, conditional and cyclic nature of suffering according to Buddhist ideas. Similar to the transactional model of stress which emphasises its cyclic and interactive nature, the cause of mental distress in Buddhism is seen as an interdependent and cyclic relationship between environmental conditions and "unhealthy" mental and physical

factors. Freedom, as indicated in the diagram, is largely dependent upon short-circuiting habitual cyclic reactions.

Figure 2 The cycle of conditional suffering and its exit (adapted from Fryba, 1995)



The release, or resolution of suffering is seen to arise from an interdependent relationship between environmental conditions and "healthy" mental and physical factors (Goleman, 1988). Like western psycho-therapies the types of mental conditions and patterns that are considered to be problematic or unhealthy in Buddhist psychology include: anger, jealousy, depression, worry, guilt, miserliness, confusion, hatred and so on (Fenner, 1995). Healthy mental factors, on the other hand, include those cognitive, affective and behavioural patterns that are aligned with non-attachment, non-aversion and non-ignoring such as: generosity, compassion, equanimity, kindness, calm and tranquility, joy, concentration, wisdom and mindfulness.

In Buddhism all mental conditions are considered to be interdependent. Thus, when healthy mental factors arise they support and are supported by each other. When one develops mindfulness, for example, it may also influence the development of a focussed mind, mental calm and physical relaxation. Volumes have been written about the practice of relaxation and how this skill may help manage stress (eg Davis et al., 1988). Though valid, these ideas will not be repeated here because the development of mindfulness is more than just a way of inhibiting anxiety through relaxation (Wople, 1969) or influencing a relaxation response (Benson, 1975). Mindfulness may also support and lead to mental conditions such as insight or wisdom, equanimity, joy, patience, concentration etc.

In a manner similar to reciprocal inhibition healthy mental factors may inhibit unhealthy mental factors and their consequences (Goleman, 1988). When one, for example, diligently practices kindness, anger is less probable to arise. Similarly if one's mind is dominated by equanimity one feels worry free. Mindfulness and wisdom or insight are considered as factors powerful enough to reciprocally inhibit all problematic "unhealthy mental factors". Thus, when one is completely mindful unhealthy mental factors do not have the opportunity to emerge.

"Extinction" is a term often used in the Buddhist vocabulary. Linehan (1993) compared mindfulness to exposure in Cognitive Behavioural Therapies. As indicated in Figure 2 above individuals may be driven to react to pleasant, unpleasant and neutral feelings and perpetuate habitual mental patterns and behaviours. Many of the habitual patterns may serve a functional purpose but many may also be dysfunctional and perpetuate the stress process . Mindfulness provides the opportunity and mental space to make a decision about how to act and exit from stressful cyclic processes. With mindfulness the condition is acknowledged and reactive responses may be de-conditioned. Old patterns of condemning unpleasant feelings, being addicted to pleasant feeling and ignoring neutral feeling may eventually be extinguished because they are no longer reinforced through habitual reactions (Fryba, 1995).

Summary

Stress is an important concept in Health Psychology because it plays havoc on individuals' mental and physical health and well being. Stress is a cyclic and interactive process that contains a number of factors including unhealthy stress responses and appraisal. Coping with stress with problem focused and emotional focused strategies provide ways to short circuit the stress process. Mindfulness is one emotional focused coping skill. Mindfulness has been a central component of Buddhist meditation practices for thousands of years. Elements of mindfulness may also be prevalent in many contemporary psycho-therapeutic approaches. Mindfulness has been used successfully to address a number of health related issues including pain and anxiety. If practiced in an intensive manner, however, there may be psychological dangers and a teacher is recommended.

The practice of mindfulness can be very basic. It involves simply knowing what is happening as it is happening in this present moment. If mindfulness extinguishes old reactive patterns that cause stress and suffering and it inhibits these patterns from arising then it is an effective way of coping. As an effective coping mechanism it is a means to an end where the end is the

means. In other words being present, attentive and open to life and all its stress is, paradoxically, a way of being and dealing with it.

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