Role of cognitive therapy in reducing human error

Q: As a Cognitive psychologist, how could you help reduce human error either at work, on the roads, or at home?

Word Count: 1819

---

1. Introduction

Human error is evident is all areas of human involvement, and may differ vastly in terms of the seriousness of the outcome. A typing error, for example, is easily corrected with no harm to anyone; however, an error in a medical procedure may have more damaging consequences for both the patient and the medical practitioner. Reason (2000) identifies two main approaches to human error namely the system approach and the person approaches. The system approach maintains that human error is inevitable, but reviews it as a consequence of larger, systemic problems. The person

approach, which is largely the more popular, views error as, ' arising primarily from aberrant mental processes such as forgetfulness, inattention, poor motivation, carelessness, negligence, and recklessness' (Reason, 2000: 768). In his essay, Reason (2000) suggests that there be a movement toward a system approach to human error, arguing that the human condition is not changeable, yet the conditions under which they work are.

The following essay will consider the role of cognitive therapy in reducing human error. Focusing on two main areas of research: cognition and behaviour. This will be followed by a conclusion of findings.

2. Cognitive Therapy and Human Error

Aaron Beck is the founder of Cognitive Therapy (CT) and in this approach he proposes that our feelings, thoughts and behaviours are all interlinked, and that thought and behaviour changes, will result in feelings being transformed (Sanders & Wills, 2006). Therefore, Cognitive Therapists make use of behavioural experiments and target cognitions in order to bring about cognitive, emotional and behavioural strategies.

Another approach offered by cognitive therapy for confronting such patterns of thought is that of Attentional Training. Wells and Papageorgiou are the founders of Attentional Training and describe it as a way of decreasing the fixed focus (which is typically self-focus) and allow for more flexibility in thought (Sanders and Wills, 2006). Harvey, Watkins, Mansell, and Shafran (2004: 67) describe the process involved in Attentional Training:

The therapy is divided into several stages:

1. The therapist first provides a clear rationale for why reducing or interrupting self-focused processing may aid recovery.

2. The patient is asked to fixate on a visual stimulus (e. g. a mark on the wall) and then to focus attention for several moments on each of a series of different sounds (therapist's voice, tapping, clock). The patient is instructed to exclusively focus on each sound alone.

3. The patient shifts their attention rapidly between the sets of sounds.

4. The patient attends simultaneously to all of the sounds, trying to be aware of as many sounds as possible.

Through this process a person preoccupied by worrisome thoughts, learns to attend to more than one stimulus, and is thus able to shift there attention when these thoughts arise.

Conclusion

This essay explored and discussed the phenomenon of human error, the processes involved in human error and the possible negative outcomes when human error occurs. This included a range of problem outcomes, from relatively harmless to far more damaging ones. Two prominent theories of human error where identified, namely the system and person approaches. Working from the person approach, The Emerging Model of Cognition provided a framework from which to consider the role of cognitions in human error. This model highlighted the role of cognitive therapy in helping to reduce human error. Schema Therapy was identified as an effective method for helping to make rigid schema more flexible, thereby freeing the individual to be able to consider a larger variety of options before acting. Attentional Training was identified as a method for approaching unconscious

schema in the attentional subsystem. This approach in cognitive therapy trains the individual to attend to more than one stimulus. This allows the individual to be less distracted by intrusive thoughts, such as worry, and attend to the task at hand.

Cognitive therapy is an increasingly popular option for psychological therapy. Interventions using this approach have shown long lasting effects, and reduce the possibility of relapse. Cognitive therapy has been developed for a large range of problems from panic and anxiety disorders to eating problems and hallucinations. It is also applied in a range of settings from mental health to life coaching (Sanders & Wills, 2006). This essay has pointed to two ways in which cognitive therapy can be useful in helping reduce the occurrence of human error.

Bibliography

Harvey, A., Watkins, E., Mansell, W., & Shafran, R. (2004). *Cognitive Behavioural Processes Across Psychological Disorders: A transdiagnostic approach to research and treatment.* Oxford University Press.

Panko, R. R. (1997). *Theories of Human Error.* Retrieved on March 1st, 2007, fromhttp://panko. cba. hawaii. edu/HumanErr/Theory. htm.

Reason, J. (2000). Human error: Models and management. *British Medical Journal, 320,* 768-770.

Sanders, D., & Wills, F. (2006). *Cognitive Therapy: An introduction.* London: Sage.

Scholl, R. W. (2002). *Social Cognition and Cognitive Schema.* Retrieved on May 3, 2007, fromhttp://www. uri. edu/research/lrc/scholl/Notes/Cognitive_Schema. htm.

Shearer, S, & Gordon, L. (2006). The patient with excessive worry. *American Family Physician, 73,* 1045-1056.