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# **Linkages between emotional intelligence and coping strategies in mastering new educational technologies**

by

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## Abstract

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Technology-enhanced learning environments such as blended learning and e-learning are utilised increasingly in higher education institutions with expectations of an increase in output rates and retention rates. As the demand for technology-enhanced e-learning courses increases, the pressure on lecturing staff to rise to the challenge also increases. In recent years great advances and improvements in the fields of learning and instruction were envisaged as a consequence of the application of new educational technologies. Although some of these promises have materialised it would seem that relatively few lecturers have mastered the skills and knowledge needed to integrate technology successfully into the practice of teaching and learning. The role of emotional intelligence is a significant construct which has not been adequately researched in terms of the mastering of new technologies in the e-learning and blended learning environments.

The purpose of the study is to explore and describe linkages between emotional intelligence and the ability to cope with mastering new educational technologies. It is presumed that this study may contribute towards a deeper understanding of emotional intelligence as a moderator of work stress and of the stress encountered in mastering new educational technologies with subsequent coping strategies. With its contribution to this emergent body of knowledge, the significance of the study lay in the clarification of the role of emotional intelligence in mastering new educational technologies.

The case study is based on the 2004 participants in the Partners@Work programme at the Department of Telematic Education at the Tshwane University of Technology. The unit of analysis provided rich and detailed data for this study. A mixed methods approach, that is, the use of both qualitative and quantitative data, assisted in crystallising the data in order to provide insight into the way participants coped with the mastering of new educational technologies.

Findings from this study suggest that a number of factors influence coping strategies when attempting to master new technologies, including self-efficacy beliefs, social networking structures as a resource, the use of positive emotions, the role of the facilitator and the emotional intelligence abilities associated with coping competencies. While a number of linkages between emotional intelligence and coping strategies could

be identified, the interdependency of coping strategies and emotional intelligence remains elusive.

The study recommends that institutions should create a supportive organisational climate for e-learning as a support for face-to face training programmes in skills development. The provision of programme facilitators trained in coaching participants, focusing on the accomplishment of self-directed learning, assisting participants in the attainment of goals, modelling positive emotive skills, and encouraging the practice of new skills may help to realise the promise of blended learning.

**Keywords:**

emotional intelligence  
coping strategies  
educational technologies  
e-learning  
self-directed learning  
blended learning  
self-efficacy  
positive emotions  
training programmes  
facilitator

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### Deo Gloria

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## List of terminology

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### E-learning terms

Term	Definition	Source
<b>Distance learning</b>	“Education provided through learning resources such as articles, learning guides and supplementary media. In distance learning the educator and student are separated by space and/or time. Distance education is extremely diverse, ranging from classic correspondence study to collaborative, internet-enhanced multimedia education”.	Nichols, 2007a,.p. 3.
<b>E-learning, eLearning, (e)learning</b>	“The use of technological tools (primarily those that can be made available over networks such as the internet) for education. E-learning is pedagogy that is empowered by technology. It may be offline (and non-networked) technologies on CDROM or DVD. E-learning usually includes digital resources and computer-interfaced communications as tools for learning”.	Nichols, 2007a,.p. 3.
<b>Interactive</b>	“Can mean anything from the ability to click on a link to another webpage, through to full interpersonal discourse. This term must always be considered in context”.	Nichols, 2007a,.p. 4.
<b>Learning Management System (LMS)</b>	“A collection of e-learning tools available through a shared administrative interface, such as Blackboard, WebCT, or Moodle. An LMS or VLE is the platform on which online courses or online components of courses are assembled and made available”.	Nichols, 2007a,.p. 4.



**Flexible/mixed-mode/blended/resource-based learning** “These terms all describe education that combines on-campus and distance approaches. Such education usually involves an instructor or tutor meeting with students (either on campus or using technology), coupled with a resource base of content materials and learning activities. Some e-learning approaches might be used as part of this mix. It includes conventional on-campus courses supplemented by some e-learning”. Nichols, 2007a,.p. 4.

**Online learning** “Pure online learning uses e-learning tools in a distance education mode. It uses technology (usually the internet) as the sole medium for all student learning and contact. The term is often used synonymously with the terms immediately above; however, it is best to reserve it to describe education facilitated only through digital technology, usually the internet. An online course typically lacks both physical learning materials and physical meetings, but the term is also used to describe the online component of an on-campus or distance education course. The term is sometimes used to refer to CD-Rom- or DVD-based courses as well as web-based ones”. Nichols, 2007a,.p. 4.

“The art and science of effective teaching. Pedagogy is traditionally understood to refer to the instruction of children but it is increasingly used in a more general sense that encapsulates ... concepts of andragogy”. Nichols, 2007a,.p. 4.

**Psychological terms**

Term	Definition	Source
<b>Appraisal</b>	“Appraisal has to do with the individual’s evaluation of the personal significance of a given event and the adequacy of the individual’s resources for coping”.	Folkman & Greer, 2000, p. 12.



<b>Broaden-and-build theory</b>	Broadened mindsets created by positive emotions, carry adaptive benefits in the sense that it encourage new lines of thought and action. Through the experience of positive emotions, individuals can transform themselves, becoming more creative, knowledgeable and resilient.	Fredrickson, 2005, .p. 123.
<b>Cognitive Appraisal</b>	“Cognitive appraisal is an evaluative process that determines why and to what extend a particular transaction or series of transactions between the person and the environment is stressful”.	Lazarus & Folkman, 1984. p. 19.
<b>Coping</b>	“Coping is the process through which the individual manages the demands of the person-environment relationship that are appraised as stressful and the emotions they generate”.	Lazarus & Folkman, 1984, p.19.
<b>Emotion</b>	“Emotions typically arise in response to an event, either internal or external, that has a positively or negatively valenced meaning for the individual”.	Salovey & Mayer, 1990, p. 186.
<b>Emotional intelligence (EI)</b>	“The ability to perceive, appraise, and express emotion; to access and/or generate feelings when they facilitate thought; to understand emotion and emotional knowledge; and to regulate emotions to promote emotional and intellectual growth”.	Mayer & Salovey, 1997, p 10.
<b>Emotional Coping Hierarchy</b>	“Facilitating the application of emotional intelligence to the coping process”.	Salovey, Bedell, Detwiler, & Mayer, 1999, p. 146.
<b>Intelligence</b>	Intelligence refers to the ability to reason with or about something, comparing and contrasting different ideas.	Mayer & Caruso, 2002.
<b>Primary appraisal</b>	The possibility of the event being a potential stressor or threat is established by the primary appraisal.	Folkman & Greer, 2000.



<b>Process model of affective response</b>	This model provides an explanation of the way emotional intelligence serves as a moderator of stress experienced in the workplace.	Ashkanasy, Ashton-James, & Jordan, 2004, p. 29.
<b>Secondary appraisal</b>	The probability of the outcome being positive or negative, is established by the secondary appraisal.	Folkman & Greer, 2000.
<b>Self-efficacy</b>	“Human functioning is facilitated by a personal sense of control. If people believe that they can take action to solve a problem instrumentally, they become more inclined to do so and feel more committed to this decision”.	Schwarzer, 1992, p. ix.
<b>Stress</b>	“Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being”.	Lazarus & Folkman, 1984, p. 19.
<b>Social Cognitive Theory (SCT)</b>	The Social Cognitive Theory (SCT) of Bandura offers an extensive framework for understanding human functioning and motivation in different contexts. Within SCT, self-efficacy is a key construct as Bandura posits that “self-beliefs of efficacy influence how people feel, think and act”.	Bandura, 1997.
<b>Re-appraisal</b>	Re-appraisal is a follow-up on an earlier appraisal and where a change is deemed necessary based on new information gained from the environment.	Folkman & Greer, 2000.
<b>Resilience</b>	Psychological resilience entails having the ability to bounce back from negative experiences, being flexible in adapting to demands in a stressful situation.	Tugade & Fredrickson, 2004.



## List of abbreviations

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AVA	Avoidant actions
CCSC & HICUPS	Children's coping strategies checklist & How I coped under pressure scale
CDM	Cognitive decision making
CON	Control
DA	Distracting actions
DPS	Direct problem solving
EI	Emotional Intelligence
MSCEIT™	Mayer–Salovey–Caruso Emotional Intelligence Test™
OER	Open Educational Resources
OPT	Optimism
POS	Positivity
REP	Repression
RSS	Real Simple Syndication
SU	Seeking understanding
SUPA	Support seeking actions





## List of educational technologies

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Technology	Application
Blogger	Hosts blog accounts
Camtasia	Screen recording software
CorelDraw	Software for creating graphics
FrontPage	HTML editor
Perception	Assessment software
Respondus	Assessment software
RSSfeed	Publish frequently updated content such as blog entries
Video	Recording of visual images
Video conferencing	Real time video session
Weblog	Public assessable web page serving as a personal journal
WebCT	Learning management system
Yahoo Messenger	Instant messaging service, including voice calling, text messaging and file sharing



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