

## Emotional stability and attributional style: Relationship and implications for research and practice

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### **Abstract**

*Personality traits have been shown to have significant impacts upon work performance, however the underlying nature of personality and the reasons for its impact have not been explained. One particular dimension of personality, Emotional Stability, has been shown to predict performance and has theoretical links with a cognitive process variable, attributional style. This study found a significant relationship between Emotional Stability and attributional style. Implications of these results for employee selection and training are discussed.*

### **Keywords**

Emotional Stability, Attributional Style, Performance, Employee Selection, Training

### **Introduction**

Over the last ten or more years trait-based theories of personality have re-established themselves within organisational studies. After some serious critiques of traits as predictors of behaviour and performance (notably Mischel, 1968) evidence has been accumulating that personality traits are stable (Epstein, 1986), and are reliable predictors (Borman, Hanson & Hedge, 1997). Personality dimensions from the so-called Big Five or Five-Factor Model, the most-widely used current factor structure (Hogan, Hogan & Roberts 1996), have been correlated with sales (Barrick & Mount, 1991), performance ratings (Ones, Viswesvaran & Schmidt, 1993), customer service (McDaniel & Frei, 1998), training success (Hough, 1992), and decision making (Remus & Kotteman, 1998).

Theoretical understanding of these relationships remains elusive (Borman, Hanson, & Hedge, 1997; Eysenck 1993). Personality traits derived from factor analysis of personal descriptors highlights the underlying dimensions of description. However it leaves the processes which produce the behaviours on which those descriptions are based a mystery (Magnusson & Törestad, 1993; Revelle, 1995).

Mischel and Shoda (1998) outline theoretical reasons and evidence that cognitive-attentional processes underlie personality dimensions and

provide long-term stability. An example of the type of process Mischel and Shoda refer to is the process of delaying gratification in order to complete an activity, often with a greater reward in mind. The ability to employ this process in childhood has been linked to a range of behavioural outcomes in later life (Mischel, Shoda & Rodriguez, 1989) as well as higher achievement on the Scholastic Aptitude Test (Shoda, Mischel & Peake, 1990), and better ratings of competencies including use of planning, response to stress, and distractibility (Mischel & Shoda, 1998). Mischel and Shoda suggest that these sorts of consistencies may form a link between personality as measured in factor-analytic studies and underlying cognitive-attentional activities.

A number of studies have provided results consistent with the view that cognitive variables may underlie personality dimensions especially for Emotional Stability (the opposite pole of which is sometimes referred to as Neuroticism). Emotional Stability has been linked with fewer task-irrelevant cognitions (Newton, Slade, Butler & Murphy 1992), reduced distractibility (Sacco & Olczak 1996), enhanced visual search speed (Magaro, Smith & Ashbrook 1983) and greater memory performance (Kello 1977). There are a range of reasons for believing that attribution theory may also be a promising avenue to explore when looking for cognitive activities that may be associated with personality dimensions such as Emotional Stability (Peterson, Maier, & Seligman, 1993).

Attributions are the many and varied ways in which people attempt to associate events in order to understand the nature of what causes them (Munton, Silvester, Stratton & Hanks, 1999). Weiner (1995) links the origins of attribution theory to writers on areas such as relationships (Heider, 1958), ascriptions of disposition (Jones & Nisbett, 1972), inferential processes (Kelley, 1967), and causal assumptions (Rotter, 1966). Perhaps as a result of this disparate parentage attribution theory has been found to be particularly appropriate to a variety of organisational behaviour issues such as cooperation (Weiner, 1995), leadership (Farquhar, 1995) and performance (Schulman, 1995).

One of the key contributions of attribution theory is its exploration of the ways in which attributions vary. Martinko (1995) states that apart from the specific events explained within an attribution, attributions vary in terms of target (self or other), function (description, evaluation and self-presentation) and various cognitive dimensions (e.g. locus of causality, temporal stability). The fact that people habitually favour certain sorts of attributions over others has given rise to a range of methods for assessing attributional habits or style, such as Content Analysis of Verbatim Explanations or CAVE (Colligan, Offord, Malinchoc, & Schulman, 1994) and a range of attributional style questionnaires (Henry & Campbell, 1995; Kent & Martinko, 1995; Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982; Peterson & Villanova, 1988).

Much of the work on assessing attributional style has been inspired by Seligman's (1975) theory of learned helplessness and its reformulation in attributional terms (Abramson, Seligman, & Teasdale, 1978). This theory sees helplessness to be an analogue for depression and suggests that it is a direct outcome of the type of attributions people make about negative events in their life. Within this theory the key dimensions by which attributional style varies are internal/external, stable/unstable and global/specific. Internal attributions are ones which assume that the individual is responsible for the event, as opposed to external attributions which place responsibility upon other people or circumstances. Stable attributions are those which remain present over time. Global attributions are those which apply to all situations an individual encounters, as opposed to specific attributions which relate to more constrained sets of circumstances.

People who make internal, stable and global attributions about negative events, and the reverse sort of attributions about positive events, are considered as a consequence to feel pessimistic and more prone to depression as a consequence (Peterson, Seligman, Yurko, Martin & Friedman, 1998). On the other hand, people who make internal, stable and global attributions about positive events are considered optimistic and there is some evidence that this attributional style protects people from depression (Seligman, 1991).

Consistent with the learned helplessness idea, attributional style appears to be amenable to learning (Seligman, 1991).

Research using the Attributional Style Questionnaire or ASQ (Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982; Peterson & Villanova, 1988), suggests however that the picture is a little more complex than Pessimism and Optimism.

Carver (1989) in particular argued that individual dimensions of the ASQ should be reported separately because they appear to provide separate levels of prediction. This argument is partially confirmed by the factor structure of the ASQ. Results from previous studies suggest that for positive events and for negative events there are two separate factors: a composite of stability and globality for positive events labelled hopefulness, and an internal/external factor; a composite of stability and globality for negative events labelled hopelessness and an internal/external factor (Bunce & Peterson, 1997; Haugen & Lund, 1998; . Corr & Gray, 1996). Hopefulness and hopelessness seem to operate as measures of optimism and pessimism respectively (Corr & Gray, 1996). Internality/externality may be related to Rotter's Locus of control (Rotter, 1992), although this is open to dispute (Peterson & Stunkard, 1992).

Implications for motivation and behaviour have been drawn from this theory and a range of studies have shown significant relationships between attributional style and various measures of relevance to organisational behaviour, performance in particular. Seligman and Schulman (1986) found that attributional style was related to both sales and length of employment in sales a finding confirmed by Corr and Gray (1996). Yates, Yates and Lippett (1995) observed a link between attributional style and mathematics performance, while Rettew and Reivich (1995) obtained a correlation between sports players recovery from defeat and attributional style. Schulman (1995) summarises a range of further studies linking attributional style and performance, which support the importance of this concept.

The fact that attributional style and personality share an impact upon variables such as performance, emotion and motivation provides a reasonable justification for suggesting that there is a link between these variables. Some research has already provided evidence to support this. As discussed above pessimism has been used as an explanation for depressive symptoms and depressive symptoms have likewise been linked to Emotional Stability (Rusting & Larsen, 1998; Nolan, Roberts & Gotlib 1999). Therefore it seems reasonable to suggest that there will be a negative relationship between Emotional Stability and pessimism as measured by hopelessness on the one hand, and a positive relationship between Emotional Stability and optimism as measured by hopefulness. This study reports on an examination of these relationships.

## **Methodology**

### *Measures*

#### *Emotional Stability*

The Emotional Stability scale from Saucier's (1994) Mini-Markers was used to assess this dimension of personality. Saucier's scales are an abbreviated version of Goldberg's (1992) scales which are specifically focussed on measuring the Big Five Factors (Widiger & Trull, 1997). Although briefer (eight vs twenty items in the Emotional Stability scale) the Mini-Marker scale for Emotional Stability has comparable reliability and fewer difficult items (Saucier, 1994; Dwight, Cummings & Glenar 1997).

#### *Explanatory Style*

The Attributional Style Questionnaire or ASQ (Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982; Peterson & Villanova, 1988) was developed specifically to assess attributional style in the framework of the reformulated theory of learned helplessness. Although individual sub-scales have low reliability the composite scores have acceptable Cronbach alphas and test-retest reliability (Reivich, 1995). As described in the introduction scores for internal/external for negative events, internal/external for positive events, hopelessness and hopefulness were calculated within this study.

#### *Participants and Procedure*

Participants were students in a first year introductory management subject at the Nathan campus of Griffith University. Inclusion in the study was voluntary, although completion of (and feedback and discussion upon) the assessments described in the measures section forms a part of the learning process for the subject. Of the 282 students who initially enrolled in the subject 239 agreed to have their results included within the study. However because the assessments were conducted at different times only 174 participants provided useable data on both instruments. Participants ranged in age from 17 to 53 with an average age of 20.8 years. Males accounted for 47% of participants and 22.5% were students from non-English speaking countries.

## **Results**

The Cronbach Alpha for Emotional Stability (0.75) is consistent with that reported by Saucier (1994) and Dwight, Cummings and Glenar (1997), and is similar to the average internal consistency reliability for measures of Emotional Stability (0.78) reported by Viswesvaran and Ones (2000). The Cronbach Alpha for the Internal/External scale for Positive (0.55) and Negative (0.47) events is low but consistent with other findings (cf. Kent & Martinko, 1995). The other scales reported for the ASQ have acceptable reliabilities (Hopelessness - 0.72; Hopefulness - 0.73) and are above the typical range

for these scales quoted by Barnett and Gottlib (1988).

Emotional Stability correlated significantly in predicted directions with Hopelessness ( $r = -0.14$ ,  $P < 0.05$  one-tailed) and Hopefulness ( $r = 0.18$ ,  $P < 0.01$  one-tailed) were significant. Internal/external negative did not correlate significantly with Emotional Stability, nor with Hopefulness, although it was correlated with Hopelessness (0.27,  $P < 0.01$  one-tailed). There was no significant correlation between Hopefulness and Hopelessness.

## **Discussion**

On the basis of this research attributional style accounts for a small but significant proportion of the variance of Emotional Stability. The correlations reported represent a conservative estimate of this relationship given the very different approach to measurement used by the Mini-Markers and the ASQ and the fact that they were designed to assess at different levels of analysis (global personality versus specific cognitive processes).

As predicted pessimism (as represented by the Hopelessness scale) is associated with reduced Emotional Stability, while optimism (represented here by the Hopefulness scale) links to greater Emotional Stability. This finding is consistent with the ideas presented in the introduction and with the views of other writers. For example Abramson, Metalsky and Alloy (1989) suggest that a stable and global attributional style for negative events leads to a sense of hopelessness about which one has no control - a person sees themselves as a victim of the fates and their emotions are captive to events. On the other hand people with a stable and global attributional style for positive events are likely to see the world as typically offering good things and consequently would be 'immunised' against adversity (Seligman, 1991). A person's self-perception would tend to reflect this increased or decreased lability of affect, leading to their assessment of themselves on the Emotional Stability scale as observed here.

The fact that both Emotional Stability and the ASQ scales have been shown to be linked to work performance especially in the area of sales is consistent with this finding. It would be profitable to determine the extent to which these relationships with work performance are independent. Some authors have already concluded from the association between Emotional Stability and performance that this scale should be used for selection purposes especially in customer service situations (e.g.. Hogan, Hogan, & Roberts, 1996). It may be tempting to conclude from this and other studies that attributional style can make a contribution to organisational behaviour in a similar manner

through the use of instruments modelled on the ASQ for selection. An alternative and probably easier approach would be to further explore the relationship between the ASQ and various sub-scales of Emotional Stability, and to target these sub-scales for selection purposes.

However attributional style has been shown to be modifiable through counselling and training and consequently a range of training approaches for enhancing one's optimism have been developed (Seligman, 1991). Training of staff to enhance their resilience in the face of adversity may have similar or better effects upon performance than use of refined selection procedures, and may prove to be better targeted. For example a salesperson who has learnt how to respond effectively and maintain their emotional centre in response to an obstreperous customer may well produce a better result than one who is naturally inured to difficulty, but does not respond well. Indeed much of current sales training is already, perhaps unconsciously, directed at enhancing the ability of sales staff to respond effectively to negative events and maintain their motivation. It would be instructive and practically informative therefore to follow up this study with prospective comparisons of selection and training strategies for performance in occupations which profit from greater Emotional Stability and optimism.

In summary this study shows that Emotional Stability is linked to attributional style. This finding holds future promise for greater understanding of personality and for managing performance in the workplace.

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