



chapter 1

The HRM-Performance Debate and the Logic of Causality

To understand the theoretical controversy over the nature of the relationship between HRM and performance, we need to appreciate the logic of causality in social research. In social research, there are three main criteria for causal relationships:

- First, the variables must be correlated. A *correlation* seeks to assess the strength and direction of the relationship between the variables identified, and it exists when the variables are observed to be related. That is, changes in one variable are associated with changes in the other, or particular attributes of one variable are associated with particular attributes of the other. For example, height and weight are considered to be statistically correlated because of the association between increases in height and increases in weight. Statistical correlation in and of itself does not constitute a causal relationship between two variables, but it is one criterion of causality (Babbie and Benaquisto, 2010).
- Second, a causal relationship exists only when the cause precedes the effect in time. Clearly, the purchase of a BMW does not cause the owner to earn a high income in order to afford the purchase.
- Third, a causal relationship requires the variables to be non-spurious. That is, the observed empirical correlation between two variables cannot be explained in terms of some third variable. For example, the observed positive association (correlation) between ice-cream sales and deaths due to drowning is plausible enough, but a causal relationship between these variables would be spurious. A third variable, temperature, explains the observed correlation: most deaths by drowning occur in the warmer summer season, which is the peak period for ice-cream sales.

Thus, establishing that two variables tend to occur together is a necessary condition for demonstrating a causal relationship, but it is not itself a sufficient condition. For example, assume that a study of university students found a negative correlation between alcohol consumption (variable A) and grade point average (GPA; variable G). That is, those students who excessively consume alcohol tend to have lower GPAs than those who abstain, and the more alcohol consumed, the lower the GPA. A researcher might therefore claim that drinking alcohol lowers a student's grades, giving as an explanation, perhaps, that alcohol adversely affects memory, which would have detrimental consequences on examination grades. But as Bonney (2010) explains, if the inverse correlation (in symbol form $A \rightarrow G$) is the only evidence, an alternative possibility exists. Achieving low grades is frustrating; frustration often leads to escapist behaviour; getting drunk is a popular means of escape; thus, low self-esteem as a result of low grades causes excessive alcohol drinking

(G→ A). Unless the researcher can establish which came first – the excessive drinking or the low grades – this explanation is supported by a correlation just as plausible as the first.

To complicate matters, suppose we introduce another variable: human emotion (variable E). Arguably, a student with an emotional problem, for example the break-up of a relationship, may exhibit escapist behaviour, including excessive consumption of alcohol. In addition, it seems plausible to suggest that emotional problems are likely to adversely affect grades. A correlation between alcohol consumption and low grades may exist but *neither* may be the cause of the other; rather, both are the consequences of a third variable – emotion. Put in symbol form:

A
E
G

Unless the researcher can rule out such third variables, this explanation is as equally supported by the data as are the first and second cases described.

In summary, when organizational researchers state that there is causal relationship between, say, pay and productivity, they mean that (1) there is a statistical correlation between the two variables, (2) a person's pay was established before the increase in productivity, and (3) there is no third variable, for example emotion, that could explain away the observed correlation as spurious. These are tough criteria to meet.

The implications of this look at causality suggest that HRM–performance analysis is inordinately complex. In effect, what appears to be a simple causal relationship between a configuration of HR practices (the *independent* variable) and performance or 'outcomes', such as profits (the *dependent* variable) only seems so because much of the discourse gives the illusion that the variables are controlled and explained. Although many peer-reviewed studies tend to underestimate the analytical challenges of proving causation (Guest, 2001a), it is commonly assumed that SHRM will improve organizational performance. Researchers, for example, can use data to demonstrate a positive correlation between clusters of 'participative' HR practices and performance outcomes. Table 3.2 above shows that employee skill and direction correlate positively with three out of the four culture measures, especially 'innovation' and 'goal' (Den Hartog and Verburg, 2004).

Employing deductive theorizing, mainstream positivists researchers might view the causal links as showing a correlation between a set of HR practices and performance. The obvious concern, based on the logic of causation, is establishing that changes in HR practices *cause* changes in performance.

Purcell and Kinnie (2008) have done an excellent job of identifying the analytical problems here. The research has to satisfy the second criterion for causation – that the HR practices (cause) take place before the increase in performance (effect). A source of measurement error is reciprocal causation, in which researchers assume that causation runs one way but not in both directions. One of the key analytical limitations in the HR–performance literature is the inconsistency in establishing the direction of causality. It is a matter of debate whether high-performing organizations attribute their success to the adoption of strategic HR practices or whether high-performing organizations tend to adopt bundles of synergistic HR practices; the evidence is inconclusive (Guest et al., 2003; Patterson et al., 2004; Purcell et al., 2009).

It is also extraordinarily difficult to meet the third criterion for causal relationships in workplace research, the possible 'third variable' explanation. The sociological study by Bolton (2005, p. 1) emphasizes, for example, that employees are 'multiskilled managers of emotion', and that emotion management plays a significant role in organizational life. Evidence that there *is* a causal relationship between HR practices and performance assumes that nothing else has changed in the meantime. Indeed, there is persistent evidence that performance is 'multidimensional' (Ostroff and

Bowen, 2000, p. 216) and is influenced by many variables both inside and outside the organization (Gerhart, 2008; Hitt et al., 2001).

The counterargument against the classic linear regression model is that HR practices have less influence on performance than do the various external economic and political variables. For instance, the implosion of the US building industry occurred not because of HR practices, but because of the 2008 subprime mortgage crisis. A similar argument can apply to the US auto industry and the case of the 'Detroit Three'. Their financial performance following 2008 depended not on SHRM, but on government bail-outs (Keenan, 2011a). In an extended causal model, the *external* causal mechanism could plausibly be the threat of downsizing that improves employee performance: high levels of unemployment in a recession three decades ago caused workers and their union representatives to become 'fearful' and more 'tractable in order to preserve jobs' (Bratton, 1992, p. 5). Exchange rates are another aspect of the HR–performance argument. Short-term volatility, as in the case of the 2010–12 European Union credit crises, for example, may significantly change overseas sales independent of SHRM.

The mediating effects of the wider external variables and the relational phenomenon make single-cause explanations of HRM and performance too simplistic. Guest (1997, p. 268, emphasis added) recognizes this problem when he states, 'We also need a theory about *how much* of the variance can be explained by the *human factor*'. Acknowledging nuances, the mediating effects of multiple key variables underscores the importance of *context* and studying employees and their values, attitudes and behaviour and social relations as factors contributing to performance.

Some scholars, even when the data establish the direction of causality, emphasize that 'what causes something to happen has nothing to do with the number of times we have observed it happening'. Hence, 'The conventional impulse to prove causation by gathering (quantitative) data on regularities ... is therefore misguided' (Sayer, 2000, p. 14). Although the researcher should not dismiss causal explanations, it is necessary, in order to better understand how the practice of HR influences performance, as well as its importance in assessing the causality of the relationship, to adopt 'a *wider* [emphasis added] conception of causation' than is customarily adopted by mainstream positivists. This epistemological position is called *critical realism*.

Adopting a critical realism approach to the study of causal inferences in HRM–performance research means that, in addition to establishing causal connections, researchers have to examine the deeper structures at work that lie beneath the observable patterns and generate those processes. A comprehensive explanation of the HRM–performance relationship therefore depends on looking 'inside the HR black box', that is, unmasking 'causal mechanisms and how they work, and discovering if they have been activated and under what conditions' (Sayer, 2000, p. 14).

Boselie et al. (2005) acknowledge that the 'linking mechanism' between HR practices and performance and the *mediating* effects of other key variables are mostly ignored. The *internal* causal 'mechanism' could, for example, be that employees' work motivation increases performance, or that organizational culture increases employees' long-term commitment and flexibility. Other internal mechanisms could relate to the psychological contract. The work of Purcell and Kinnie (2008) lends credence to the view that we need to take account of employees' attitudes and behaviour, organizational culture, leaders, the behaviour of immediate managers as 'HRM agents'.