Lee and Mitchell’s unfolding model of employee turnover - a theoretical assessment

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Lee and Mitchell's Unfolding Model of Employee Turnover - A Theoretical Assessment

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Lee And Mitchell’s Unfolding Model Of Employee Turnover – A Theoretical Assessment

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This paper offers a critique of the ‘unfolding’ model of employee turnover (Lee, Mitchell, Holtom, Daniel & Hill 1999), and is intended to contribute to debate on the theoretical and operational merits of this alternate approach to analyzing turnover. The critique explores the model’s conceptual framework and theoretical contribution, as well as offering thoughts on logistical and operational issues.
Some people’s temperaments are so unfortunate that among a thousand perfections they will find a single defect and censure it and blow it out of proportion. They are the garbage collectors of the will and the intellect, burdened down with blemishes and defects: punishment for their poor discernment rather than proof of their subtlety. They are unhappy for they batten on bitterness and graze on imperfections (Gracián 1647 / 1994: 78).

Gracián, the seventeenth century Jesuit scholar advises his readers to ‘go straight to the good in anything’ (ibid.). Although this would be an unwise injunction for the assessment of scientific theory, it is hoped this paper does not stray too far in the other direction.

**DESCRIPTION OF THE UNFOLDING MODEL**

Many of the ideas relevant to an understanding of the unfolding model are first expressed in Lee and Mitchell’s (1991) paper. This contains four elements which are central to later versions of the model; dissatisfaction with current turnover theory and call for new theory; emphasis on the decisional aspect to turnover and use of ‘image theory’; introduction of two concepts ‘shock’ and ‘scripts’; assertion that people leave organizations in different and distinct ways. The core characteristics of the unfolding model are that;

**It is based on image theory (Beach 1990).** This is an alternative to traditional accounts of decision-making such as classical decision theory (the basis of March and Simon’s ‘inducements-contributions’ balance and equilibrium account of turnover (1958: 93)). Image theory incorporates this and other theories of decision-making, but places more emphasis on
intuitive and automatic aspects (Mitchell & Beach 1990) as well as the need for decisions to ‘fit’ with internal values, goals and strategies (Beach 1990: 3-4). This is unlike, for example, expectancy theory (the basis of Porter and Steers’ (1973) ‘met expectations’ account of turnover) which assesses external criteria.

The unfolding model introduces two constructs which potentially contribute to turnover theory. The inclusion of script enactment may help to describe how certain decisions to turnover can bypass a stage of job search or the evaluation of alternatives (Hulin Roznowski & Hachiya 1985: 247-8), thus developing M obley’s notion of impulsive quitting (M obley, Griffeth, Hand & Meglino 1979). The inclusion of an element of shock as needed to, “… shake employees from their lethargy… (Lee & Mitchell 1991: 118)” neatly captures Becker’s (1960) notion of sunk costs, Rusbult and Farrell’s (1983) investment dimension and Mercer’s (1979) idea that inertia inhibits turnover. It also develops Sheridan and Abelson’s (1983) notion that employees fundamentally wish to retain employment.

The model is processual or evolutionary - hence ‘unfolding’ (Lee & Mitchell 1991). It outlines four different ways in which people may choose to leave organizations, thus accounting for different types of leavers (Hulin et al., 1985) as well as acknowledging different reasons for leaving (Abelson 1987) better than expectancy or utility accounts can. These latter accounts (M obley 1977; Price & M ueller 1986) are restricted to analyzing work factors, and fail to assess values.

Description Of The Four Paths
Paths 1 to 3 show decision pathways which begin with an initial shock. In path 1 this leads to enactment of a pre-existing plan of behavior or script, which precludes search or evaluation and
leads directly to leaving. Paths 2 and 3 show how a shock leads to image violations which cause an employee to consider their attachment to the organization. In the absence of a script, path 2 describes where the violation is so great that it triggers termination without consideration of job satisfaction, or search. Path 3 shows how violation leads to an evaluation of one’s job and alternatives in the light of low satisfaction, which leads to termination after positive assessment of the likelihood of a job offer. In paths 4a and 4b there is no initial shock. In path 4a, over time, lower levels of job satisfaction cause an employee to quit without considering alternatives. Path 4b outlines the traditional account of turnover, where low job satisfaction leads to termination after search and consideration of alternatives.

Support for and Development of the Model To Date

In Lee et al.’s 1996 study, the model was tested on a sample of 44 nurse leavers, using primarily qualitative and case study techniques. The significance of the empirical findings in terms of existing accounts of turnover, is that they found that 45% of the sample quit without an alternative job offer in hand. This is problematic for a traditional account, which typically outlines the causal path: dissatisfaction > search > generates alternative(s) > weighing up alternative(s) > turnover. They also found support for the role of a hitherto untested concept, namely shock, as 58% of leavers reported the existence of such an event. The study undermined traditional accounts further as it showed in some instances of leaving, there was no antecedent affective factor (such as low commitment or satisfaction).

Following this initial support for their theory, Lee et al., (1999) tested the unfolding model on a sample of 229 leavers of accountancy firms, this time using a structured questionnaire. Again
the results revealed support for the underlying hypothesis that, “... people use different and distinct psychological processes when leaving an organization (1996: 5).” Minor modifications (Lee et al., 1999: 452-3) to their earlier model resulted in an impressive ability to classify 212 of 229 leavers, or 92.6%. In addition, none of the cases which were unable to be classified falsified the model (shown below).

CONCEPTUAL CRITIQUE OF ASPECTS OF THE MODEL: SCRIPTS

Broadly speaking, there are two senses of the term ‘script’ in psychology. Initially used in clinical psychology (Berne 1961), in this field there is an explicit link to the aesthetic or everyday sense of a script as something that is acted out (Steiner 1974). The ‘script’ in transactional analysis represents, “… the blueprint for a life course (ibid.: 51)” and is a life plan, “… formed in early childhood under parental pressure (Berne 1975: 32).” The term ‘script’ is apt, given the emphasis within transactional analysis on the similarity of Greek tragedy and the more prosaic tragedies of modern life courses (Steiner 1974: 52). Classical themes of predictability and submission to fate are apparent to the analyst versed in the notion of scripts and scripted behavior. The salient difference is that whereas Greek heroes are subject to the will of the gods, “… human beings are deeply affected by and submissive to the will of the specific divinities of their household – their parents...” (ibid. 54). Schank and Abelson (1977: 63) who are perhaps most famously associated with the term script within mainstream (cognitive or social) psychology summarize this notion of script as unconscious and personal.
The historical evolution of the term ‘script’ in mainstream psychology can be traced back to Bartlett’s (1932) use of the term schema and its role in memory (in Neisser 1967: 287). Indeed many writers equate the two terms, or see scripts as being a particular form of schema, namely event schema (Arnold, Cooper & Robertson 1995: 417; Fiske & Taylor 1984: 167; Hayes 1998: 367; Smyth, Morris, Levy & Ellis 1987: 188). In this sense, the schema is seen as a basic building block of more complex psychological structures. Piaget (1952) similarly used the term schema to refer to abstract characteristics of thinking and problem solving (in Mandler 1984: 3). Schank and Abelson define a script as, “… a structure that describes appropriate sequences of events in a particular context... Scripts handle stylized everyday situations... Thus a script is a predetermined, stereotyped sequence of actions that defines a well known situation (1977: 41).” Hudson writes, “Scripts are mental structures which organize information about the sequence of predictable actions, locations, roles and props that constitute events (in Bennett 1993: 142).” Gioia and Poole (1984: 449) define a script as, “… a schematic knowledge structure held in memory that specifies behavior or event sequences that are appropriate for specific situations.” Other, similar definitions can be found in: Abelson (1981: 717); Fiske & Taylor (1984: 169); Graesser, Woll, Kowalski & Smith (1980: 504); Lord & Kernan (1987: 266); Louis (1980: 240); Hayes (1998: 367); Mandler (1984: 14). The key elements of these definitions can be synthesised thus, scripts are: (1) context specific, (2) event based (3) structures for organizing knowledge about (4) well-known situations. The sense of ‘well-known situations’ is impersonal, or social, so scripts deal with (5) cultural knowledge (Hudson: 145).

In work on the unfolding model, the concept of script is defined as; “... a routinized behavioral response that is similar to a ‘habit’ ... or ‘standard operating procedure’...” (Lee & Mitchell
1991: 106); “… a relevant past experience…” (Lee et al., 1996: 6); “… a preexisting plan of action…” (Lee et al., 1999: 451). Scripts are allied with ‘habits’ and ‘schemas’ in the 1994 paper (p 71), and these are in turn defined as, “… psychological mechanisms that result in routinized behaviors... “. Scripted behavior refers to; “… preplanned courses of actions... “ (Lee & Mitchell 1991: 77-78), “… where no extensive cognitive deliberations that evaluate the current or alternative jobs take place... “ (ibid. 85). The most formal definition offered is that ‘matching scripts’ (i.e. enacted or initiated scripts) or ‘pre-existing plans’ are;

devoted specifically to the retention of context-specific knowledge about events and event-sequences and to the guidance of action on the basis of that knowledge (Gioia 1986: 57 in Lee et al., 1996: 7)

In the 1996 paper it is theorized that scripts may be present without directly affecting quitting, instead acting in a ‘catalytic role’ i.e. assisting deliberation in pathways 3 and 4. The role of scripts is again refined in the 1999 paper where it is indicated that scripts may be present in other pathways, but they must not be carried out, except in pathway 1 (where a shock leads to the enactment of a preexisting plan of action, namely to quit without search or consideration of alternatives). A synthesis of this construction reveals a somewhat different version to the concept of script as outlined above. The essential differences appear to be that a script is a (1) life-based (i.e. relating to personal dimensions rather than a common or shared scenario) (2) preexisting plan based on (3) personal experience (though this could come via learning from others’ experiences) which prompts (4) an habitual or automatic decision to quit. It can also be inferred that given the context of an individual making the (rare) decision to quit, this sense of
scripted behavior applies to a (5) **novel situation**. Any or each of these differences may be significant and would need to be explicitly addressed before the construct of script can be used in operationalisation of the unfolding model. The importance of establishing construct validity has been well documented by turnover theorists (Mobley et al., 1971; Price & Mueller 1986; Hom & Griffeth 1995). Whilst applauding the innovation of Lee and Mitchell, and whilst there may be a need to account for scripted behavior within any comprehensive theory of decision-making, it is possible there are problems with the current account of scripts in the unfolding model. These may not be restricted to differences in definition or usage, such as are outlined above, but could also extend to other theoretical issues, as well as causing a posteriori concerns.

**Scripts As Social Schemata**

Whilst there is evidence that some decisions relating to individuals’ quitting are likely to draw on a store of personal memories or schema (Lee & Mitchell 1996), to refer to this as *script* driven ignores the important sense in which scripted knowledge or behaviors are social schemata, as Mitchell and Beach (1990: 7) outline, “... specific terms are used to identify schemata that serve particular functions. Thus for example, for social behavior, the schemata are called scripts...”. Any imprecision in use of the term script may also prove problematic given the underlying theoretical basis of the unfolding model, namely Beach’s image theory of decision making (1990). Within image theory, images are explicitly defined as a type of schema;

Images are schemata that are specific to decision behavior and represent the decision makers guiding principles relevant to some sphere of action. They also represent the
decision makers goals in that sphere, what he or she is doing to reach those goals, and his or her view of how well those efforts are succeeding (Beach & Mitchell 1987: 201-2).

To include scripts as an additional, separate construct describing schematic behavior may prove problematic in operationalisation of the unfolding model, as this may threaten construct differentiation. Images as ‘guiding principles relevant to some sphere of action’ may represent the same construct as what Lee et al. describe as scripts, which are described as “… a preexisting plan of action… (1999: 451).” Developing this point, Mitchell and Beach describe the ‘strategic image’ (one of the three decision making schemata within image theory) in these terms;

The collective terms used for the constituents of the strategic image is plans. Plans are defined as abstract schemata that are composed of specific acts, called tactics and forecasts, which are the decision maker’s judgments about what will happen if he or she implements a particular plan (1990: 9)

An additional concern is that restricting the sense of script to quit behavior neglects the possibility that other related behaviors may be scripted. It may be that a script, in the sense of a preexisting plan, could also exist for search behavior. In this case, an employee might know (s)he would start looking for a job, if a particular shock happened. This behavior would be scripted, but not counted as such within the unfolding model, which shows scripts and search behavior as mutually exclusive.
Script As Routine

It also seems incongruous to talk of scripts where the situation is a novel one, as rare or problematic situations are more likely to provoke thought and query (Abelson 1976 in Louis 1980; Feldman 1981: 127; Gersick & Hackman 1990: 83; Langer 1978 in Louis 1980). Gioia and Poole write that;

Novel situations (e.g. appointment to a newly created position) require intensive conscious processing to decide appropriate behavior and action. Such action involves little or no script processing – no script for behavior exists (1984: 453).

‘Appointment to a newly created position’, as an instance of a novel situation, would presumably occur with a frequency similar to other rare organizational events such as shocks. In fact script behavior is even rarer than shocks in the unfolding model, shocks are a necessary precursor to scripted behavior and they can also be present in paths 2 and 3, where scripts are excluded.

Louis and Sutton (1991) similarly see novelty as precluding or heavily restricting automaticity. They portray individuals as switching between two states of mind, ‘automatic processing’ and ‘conscious engagement’, the prime reason for switching being entering a novel situation.

It is also important to note that scripts are not typically seen as merely habitual or automatic. Instead, they organize comprehension when activated “... a script is a knowledge structure, not just a response program... (A belson 1981: 722)”. This raises further issues for a construction of script as ‘preexisting plan’.
‘Rehearsing’ Scripts

It is possible to see how individuals may exhibit scripted behavior in relatively infrequent situations, where those situations have previously been imagined and behaviors in such situations have been mentally ‘rehearsed’. Anderson (1983) has shown that, “...imagining oneself performing (or not performing) a target behavior produces corresponding changes in intentions towards that behavior...”. Support can be gained from other research streams, where prediction or rehearsal is shown to influence future behavior (Greenwald, Carnot, Beach & Young 1987).

Sherman (1980: 217) has shown that, “...people mispredict in a socially desirable direction [and] one’s predictions for behavior, although wrong from the perspective of an overt behavior group, serve as a determinant of actual behavior once the situation arises.” This implies that, “...prediction of a behavioral sequence involves evoking some cognitive representation of the situation... (ibid. 218)”. Merton’s notion of the self-fulfilling prophecy (1957: 421-436) also indicates future behaviors may be conditioned by prior schematic representation. Lord and Kernan (1987: 265) suggest that scripted behavior should not be limited to well structured or programmable situations, since the “...degree of structure may depend as much on the development of worker’s cognitive systems as on characteristics of the situation.”

Finally, research in clinical psychology (Tomkins 1980 in Abelson 1981) indicates that where there is a strong emotional reaction in a situation and this reaction is repeated in similar situations, even though these situations are non-identical, the emotional aspect may become amplified and capable of being connected to other situations via analogy rather than strict
repetition. We could see this translate readily into Lee and Mitchell’s path 1, where a shock produces a strong emotional response and because of similarity to a previous, analogous emotional response, a “matching script” is evoked. This interpretation would show Lee and Mitchell as having more in common with a transactional psychology perspective on scripts, with the analogous situations being akin to what Berne (1964) calls ‘games’. This is in contrast with cognitive psychology, where scripts are everyday, event based, social schemata.

Scripts and Recall

There are also some particular methodological problems with incorporating the notion of scripted behavior in the unfolding model. Research to date has relied on retrospective self-reports of turnover (Lee et al., 1996; Lee et al., 1999). We should not overlook the significant empirical contribution to turnover research of these studies (historically this has been dominated by cross-sectional, prospective, survey-type research, conducted on current employees). Neither however, should the methodological limitations of retrospective reporting be ignored. Lee et al., (1999: 459) point to three different research streams which offer support for their method: research on the accuracy of episodic memory structures (Wheeler, Stuss & Tulving 1997); research on self-based referencing structures (Symons & Johnson 1997) and research on retrospective reporting in organizational research (Miller, Cardinal & Glick 1997). Nonetheless, there are generic issues related to the validity of both self-reporting and retrospection. Miller et al., (189-90) offer a concise summary:

As Golden (1992), Huber and Power (1985), Wolfe and Jackson (1987), and many others have suggested, inaccurate recall in retrospective reporting can result from inappropriate
rationalizations, oversimplifications, faulty post hoc attributions, and simple lapses of memory. A secondary problem is that key informants may try to present a socially desirable image of themselves or their firms.

It is important to note that Miller et al. support the use of retrospective reporting as a method, “... if the measure used to generate the reports is adequately reliable and valid (189).” However, the ‘secondary problem’ of leavers presenting themselves in a socially desirable light may be one which Lee et al. have not comprehensively addressed. For example, although voluntariness was assessed using both organizational and leaver data, studies using the unfolding model to date have relied only on leavers’ assessment of avoidability, an intrinsically bipartite construction (Abelson 1987; Campion 1991). A more particular problem with reliance on self-reporting relates to the literature on recall and scripts. Although unusual events may be recalled more clearly when associated with a script (Hudson 1993; Hudson & Nelson 1984), and be more readily ‘tagged’ (Graesser et al., 1980), the nature of a script as a ‘gap-filling phenomenon’ (Abelson 1981) is such that recall may well be less accurate in scripted situations than in non-scripted situations (Graesser et al., 1980). Prototypical aspects of the script are likely to be recalled even where they did not happen, given that scripts assist inference (Fiske & Taylor 1984: 141). Additionally, automaticity may result in miscoding of information at source (Gersick et al., 1990). Each of these may affect the reliability and validity of retrospective reports.
Summary and Suggestions

This review of the literature on scripts shows there are significant differences between the use of the term script by the architects of the unfolding model and its traditional senses within both mainstream and clinical psychology. This has implications for the operationalising of the unfolding model, and for the assessment of construct validity. There is a need to clarify the relationship between image theory (as a psychological theory of decision making which invokes schemata) and the unfolding model (which represents a particular application of this theory to decisions relating to turnover, and which incorporates another type of schema). Additionally, as well as a priori, theoretical and definitional concerns, there are concerns with the application of this concept. It remains contentious to use the term ‘script’ with reference to decisions to leave, as these decisions are personal and infrequent, although this is perhaps mitigated owing to the possibilities of ‘rehearsal’ and the role of analogy. Restricting scripted behavior solely to quit behavior is problematic as other related behaviors (to search) may be legitimately described as scripted. A posteriori, use of the script concept also has particular methodological implications relating to the prevailing method of retrospective reporting used in tests of the unfolding model. Choice of an alternate construct, or more rigorous definition of the existing construct might still prove insufficient if there are unresolved issues surrounding operationalisation or the psychological status of scripts in the unfolding model.

SHOCKS

Lee and Mitchell ask in their 1991 article, “…what might shake employees from their lethargy?”. Their answer, ‘shock’ is in sympathy with other related ideas within turnover research such as Becker’s (1960) notion of sunk costs, Rusbult and Farrell’s (1983) emphasis on
investment and Mercer’s (1979) idea that inertia inhibits turnover. It also develops Sheridan and Abelson’s (1983) notion that employees fundamentally wish to retain employment.

**Shocks And ‘Stimulus Events’**

Lee and Mitchell (1994: 72) compare and contrast their concept of ‘shock’ with Rosse and Miller’s (1984: 208) notion of a ‘stimulus event’. In Rosse and Miller’s model of individual action, a stimulus event initiates a cycle of behaviour-adaptation. The stimulus, “…brings relative dissatisfaction into the person’s awareness [that] prompts thoughts on what the person can do about the source of dissatisfaction (207).” The behavior-adaptation model outlines a cyclical process, which continues until ‘successful adaptation’. “Successful adaptation results when cycles of interaction between the individual and the environment cease with respect to the stimulus producing relative dissatisfaction (ibid.).” Lee and Mitchell’s idea of a shock is contrasted with the stimulus event in two ways (1994: 72). Firstly, whereas a stimulus event may range from being just noticeable, to highly significant, a shock is, “…a jarring, an undeniable, or clear and present entity (ibid.).” Secondly, whereas the stimulus event for Rosse and Miller prompts a subjective utility type comparison, and recognition by the subject that they could be better off (Rosse & Miller 1984: 208), the shock is aligned more closely with image theory, and prompts a process of matching, and image judgments (Lee & Mitchell 1994: 72).

The first of these differences is consistent with existing ideas relating to the importance of inertia, investment and sunk cost in influencing turnover decisions. A shock needs to be ‘jarring’ to overcome these checks on employee mobility. The second difference between shocks and stimulus events reflects the underlying role of image theory in the unfolding model of turnover, but it is also worth noting one more major difference between the notion of shocks in
the unfolding model and the ‘stimulus event’ construct used by Rosse and Miller. Whereas Rosse and Miller’s model posits a cycle of behaviour adaptation, in its current formulation, the unfolding model does not allow the possibility of feedback. Rosse and Miller claim as a distinct theoretical benefit the allowance for such non-recursiveness, “…this framework explicitly includes consideration of a feedback loop between adaptive behaviors and the environment (207).”

Including a non-recursive aspect might be seen as a potential benefit for any model which purports to code complex behaviors. This is because it potentially allows the modelling of iterative processes, reciprocal causality and feedback. If some decisions to turnover are best described by reciprocal causal relationships between the constructs employed in the unfolding model, then reflecting this would require significant changes in its structure. It is worth keeping in mind that including non-recursiveness could jeopardize two a priori, theoretical benefits of the current model, namely parsimony and comprehensibility, as well as making a posteriori operationalisation of the model problematic.

**Shocks And Reasons For Leaving**

To date little empirical work has been done that considers the role of an initial precipitating event in turnover although one area in which there could be retrospective support for the unfolding model may be the identification of ‘shocks’ in existing data sources which cite employee’s reasons for leaving. Notwithstanding that research into reasons for leaving often fails to record a wide enough range of possible causes in sufficient detail (Campion 1991), a qualitative meta-analysis might nonetheless further substantiate the validity of the shock
construct. Surprisingly, the 1999 questionnaire by Lee and Mitchell does not explicitly ask the leaver to list the reason(s) he/she left. Although there is a section related to identifying the existence and nature of shocks, “was there an initial event that first caused you to think about leaving”, and a subsequent open-ended question asking respondents to describe the shock (if there was one), there are no questions asking respondents to say why they left. Granted the unfolding model is a model of the decision process, yet it still seems curious that no data on the underlying reasons for leaving is sought, given that this could potentially throw further light on the nature of any shocks; for example in contrasting cases where the shock could be identified as the sole reason or as one of a raft of reasons, or whether it might prove to be ‘the last straw’. Additionally, assessment of why people left could help identify the nature of image violations.

A further reason for including questions about the ‘why’ of turnover would be to investigate the possibility that the relative importance of constructs may be different for different leavers who pursue the same pathway. For example, although a shock may prompt search and evaluation of alternatives prior to leaving, it may be more salient to address the end stage of this decision pathway, (search and evaluation) rather than the initial shock. Two contrasting thought experiments might help to illustrate this.

If a shock initially prompts a job search (path 3), but the reason given for leaving is, “...a dream offer came up, and I couldn’t refuse it...”, then we might infer that the most significant element in the turnover process is the outcome of the search. It may be that in different circumstances, (after an unsuccessful search) the employee would have remained in employment, even though a single event prompted them to ‘first think about leaving’.
This represents a very different scenario from a situation where a shock prompts the decision to quit, but the would be leaver’s financial circumstances hold him or her ransom until the first viable alternative comes. In this second case, the reason given might be along the lines of, “... as soon as Joanne was fired, I knew I was going to quit, it was just a matter of when.” In the first instance, we can see the shock is a necessary condition of turnover (because it prompts search), but it is not a sufficient condition as it is only after a successful search the employee leaves. In the second instance, however, the shock is both a necessary and sufficient condition of turnover.

Even though both cases would be represented or classified as ‘path 3’ quits, the implications for organizational action may prove very different in each scenario. In the first instance, there might be little need for an organization or department to change, if it is accepted one cannot avoid an employee leaving in such exceptional circumstances (notwithstanding that improvements might reduce propensity for employees to search). In the second instance, investigating the nature of the shock may be far more important given that this is the ‘real’ reason for the employee leaving. Commonsensically, the relational aspect of the turnover decision would imply that the first instance represents a substantially different phenomenon to the second, and this in turn indicates there may be a need to further differentiate between organization leavers, over and above the existing pathways. Including analysis of reasons for leaving may be one way to aid such differentiation.
Shocks And Dichotomous Questions

Most of the questions relating to shocks in the 1999 survey are dichotomous. This is somewhat curious, given that the principle advantage from a statistical perspective of retrospective reports into turnover, is the ability to dispense with a dichotomous dependent variable. As the sample are unanimously voluntary leavers, this would seem a rare opportunity to conduct turnover research where the dependent variable(s) is(are) non-dichotomous (Hesketh 1993: 135; Jaros, Jermier, Koehler & Sincich 1993). Potentially, also, the dichotomous nature of questions assessing one of the models’ key concepts could encourage flattering results. The 1999 article (p 456) cites one, ‘theoretically meaningful and statistically significant’ correlation, where responses to the question, “was the event expected” had a correlation coefficient of – .91 with the question, “was the event unexpected”. Given the possible answers to each question were either yes or no, and that these questions directly followed one another, it is perhaps unsurprising such a high correlation was found.

Restriction to dichotomous categories denies the possibility of a more comprehensive account of the role of shocks in turnover. In the 1994 article, Lee and Mitchell write, “... some shocks can be entirely neutral. Others may involve some positive, neutral and negative aspects, but... their composite may be neutral. Thus, a shock can have a mean and variance (p 61).” Restriction to yes / no questions in the 1999 survey makes it difficult to see how to explore this. For example how could a mean and variance be assessed? Future research might adopt scaled, semantic differentials. The question relating to expectancy could be re-phrased as, “To what extent would you say that the event was expected” with (1) totally unexpected... (5) totally expected.
Shocks And Scripts

A further consideration which perhaps raises a problem for the current formulation of the unfolding model is this. To what extent is it meaningful to talk of a shock actually *causing* scripted behavior, as distinct from a shock precipitating enactment of a preexisting script? There is a difference between path 1 as currently hypothesised: shock > ‘probe’ > ‘matching script’ > quit; and this formulation: shock > forms script > carry out script > quit.

In the second case, no script existed before the shock, yet scripted behavior occurred because the shock actually formed a script. A hypothetical example might be: departure of a colleague [shock] > “if they can do it, so can I” [script formation] > quit.

Although this hypothetical example is not explicitly ruled out in the current formulation of the unfolding model, it is informative for two reasons. Firstly, it raises the issue of how scripts may be formed, which is at present incompletely addressed. Secondly, it raises the possibility of a formative connection between two of the constructs in the model, which transcends the current temporal sequencing.

CONTEXT SPECIFICITY

Before concluding with an overall assessment of the unfolding model, it is worth reflecting on some issues relating to particularity of context. Although such a model purportedly applies to all types of leavers, like any model of complex organizational phenomena, the extent to which there
are contingent effects on key variables is a matter open to question. For example, the 1999 survey (which was of 229 accountants) includes a section (section X) related to the effects of legal liability on the accounting profession, which would obviously not translate to all other fields. In addition, there are questions relating to ‘generating new client business’, ‘professional values / ethics’ and ‘professional goals’, which could similarly be restricted to particular industries or workers. Using the classification rules as a guideline, it is possible to see that these questions relate to key variables in the following way: Shock (1 of 4 items is context specific); Image violation (2 of 8 items); Job Satisfaction (1 of 13 items).

It seems clear, then that the survey operationalising the model should be tailored for particular contexts. This prompts two questions. Firstly, how much does the need to reflect context specificity detract from the claims of the model to be a comprehensive account of turnover? The greater the need to reflect or capture a particular context, the less it seems clear that the model represents all leavers in all situations. Even where it is argued that it is only the instrument which changes (i.e. survey questions), there may still be problems in cross validating the concepts within the model, or conducting meta-analysis. The second question is, can there be an algorithm or method for generating these context specific questions? Without a universal, axiomatic method, attempts to incorporate the necessary context specificity will inevitably result in the model applying with different rates of success across different occupations. This in turn would undermine or qualify the universality of the unfolding model.
Context and Scripts

One thing which is not explicitly considered within the literature on the unfolding model, is the possibility of a given industrial climate or culture influencing the formation of scripts. Inclusion of this could provide explanation for how scripts are formed, over and above the current picture presented by Lee and Mitchell, which is that they are principally a result of personal experience. Establishing a linkage between the formation of individual scripts, and the prevailing pattern of turnover within an industry might offer one way in which the unfolding model could be used more in a prospective, predictive mode, rather than the current, predominantly retrospective and classificatory mode. It should be recognised that establishing such a link would be likely to necessitate a redefinition or refinement of the current notion of script, as this is currently restricted primarily to personal memories in the literature on the unfolding model.

To give an example, if there is a substantial proportion of workers in a firm or industry who are temporary workers, or ‘drifters’ (Hulin et al., 1985), then this might influence quit and/or search behavior in the manner of a ‘script’. Alternately, research which shows some turnover decisions are clustered in time and networks of social interaction (Krackhardt & Porter 1986) points to ways in which scripts may be formed in even more specific contexts, such as work teams, or groups of workers in similar roles. Even more generally, there may be prevailing labour market characteristics within an industry sector which influence patterns of turnover. In the health sector, for example, nurses may consider finding alternative employment to be straightforward and decisions to leave could take into account the high probability of finding another job soon (Lee et al., 1999: 453). It is worth noting that this search for a linkage between macro social characteristics and the micro psychological process of a personal decision to
turnover may be in danger of running aground on the ecological fallacy. Nonetheless, seeing scripts as social schemata could resolve this, if this provides a way of understanding the interplay between social and cultural milieu and the actions of individuals in those settings.

**Context and Shocks**

It also seems clear that particular shocks may be specific to industry or organizational sectors, and although the questions on shock in the current survey are non-specific, it may be necessary when using the model in a different context to include questions which make particular reference to industry-specific likely precipitators of turnover. This could be informed by the literature on turnover which relates to that particular industry sector, for example, where it indicates common, yet context specific reasons for leaving. An example of this could be Lee et al.’s (1999) identification of the theme of legal liability in the accounting sector.

**OVERALL THEORETICAL ASSESSMENT**

In assessing the overall value of the model, it is appropriate to use the five criteria for successful theory identified by Lee and Mitchell (1999: 451). These are: a theory’s statements can be judged for consistency and parsimony; a theory should be falsifiable; a theory should result in enhanced scholarly understanding; a theory should help in control and management of behavior; a theory should help in predicting when and where theorized behaviors might occur. Some of the prior discussion is relevant in considering the first of these criteria, but to conclude, this paper will evaluate the model in two of the other areas, namely: a theory should be falsifiable, and a theory should help with predicting when and where theorized behaviors might occur.
A Theory Should Be Falsifiable

The model as shown in figure 1 can be formally described as a (1) process model, which shows a (2) temporally ordered, (3) causal map of (4) mutually exclusive (5) potential end states. The process modelled is the decision to quit, temporal order and causality is implied and represented by the oneway arrows, and the end states represent five different potential decision pathways.

In mapping the survey results onto this model, a classification rule indicates whether to count the constructs tested (shock, script, image violation, search, evaluation, job offers), as present or absent. This raises issues relating to the extent to which it its legitimate to impose a dichotomy on potentially non-dichotomous variables. The formal similarity between this type of dichotomisation and the mutual exclusivity of the branches in the path model may leave the unfolding model open to criticism on the grounds that the instrument and application rules in some way ‘force’ the data.

On a related point, as has been mentioned, the 1999 survey seems to simplify the nature of precipitating shocks. This section primarily includes dichotomous questions, and this precludes the possibility of multiple or complex (e.g. both positive and negative) shocks. Nonetheless, it is possible to imagine a scenario where, for example, two or more shocks combine to influence a decision to leave (spouse falling ill + unexpected job offer). Although this case (or a complex shock scenario) wouldn’t necessarily falsify any of the pathways, a person responding to the questionnaire would not be able to represent such a situation, or to put it another way, application of the survey instrument could result in potentially contradictory or falsifying data not being accurately represented.
In other words, it may be that the absence of falsification does not necessarily reflect an empirical reality, but is instead a function of the way in which a theory or instrument represents that reality. The inclusion of discrete, mutually exclusive elements in a survey whose end product is a map of discrete, mutually exclusive elements may undermine the case for that theory’s being falsifiable. This may be compounded by the classification rules, which can only result in mutually exclusive states, for example ‘shock’ or ‘no shock’, ‘script’ or ‘no script’, ‘search’ or ‘no search’ etc. This can perhaps be illustrated by reference to Judd, McLelland and Culhane’s (1995: 434-5) point that, “…[t]he model or the argument is not the same thing as the data. Rather it is a construction that the researcher derives from theoretical considerations and imposes on the data, recognizing that the goal of efficient communications requires that the model be a simplification of the data.”

This can be expressed in the formula DATA = MODEL + ERROR (ibid.), or more appositely in Tukey’s (1991) formula DATA = FIT + RESIDUAL (in Judd et al.). The implication of taking into consideration residual elements with respect to operationalisation of the unfolding model may be that potentially falsifying cases go unrecognised, if there is a possibility of data being ‘forced’ into one of the paths, or if it is impossible for respondents to represent alternate scenarios. This is perhaps significant in the historical context of research into turnover, which has revealed that seemingly straightforward dichotomies, between for example, voluntary and involuntary turnover, or avoidable and unavoidable turnover in reality mask complex relational constructs (Abelson 1987; Campion 1991; Hom & Griffeth 1995; Mobley 1982; Price 1977; Price & Mueller 1986; Samuel 1969). This can be developed by looking at two other potential
limitations of the unfolding model, namely its recursive nature, and the absence of competing frameworks.

**Recursiveness In The Model**

There is no scope to represent reciprocal causation in this model. Yet conceptual similarities between the script construct as schema, and the images constructs as schemata point to one way in which there might be a feedback loop. For example, as well as the global decision to quit involving decision-making schemata, there may be further schematic or scripted themes at different stages of this decision. Firstly, the job search may reveal an option which triggers enactment of a phenomena akin to what Lee and Mitchell call a “matching script”. This would then represent an example where search had been conducted and a script were carried out. Indeed one could make the case that scripted behavior might in fact be more likely when alternatives have been sought, because a job offer in this instance might be less of a novel, or unexpected situation. Instead search may prompt the very kind of deliberation and mental rehearsal which is likely to encourage near automatic or scripted behavioral response. Secondly, an alternate case where schematic or scripted themes might come into play at different stages of this decision could be where the evaluation of an offer involves consideration of ‘fit’ with one’s images. Additionally, it is possible to see how the advent of a shock during otherwise gradual withdrawal may prompt quitting without deliberation, as Lee and Mitchell indicate (1996: 30).

The first two of these thought experiments may represent reciprocal causation, while the third may represent what Lee et al. (1996: 30) prior to the 1999 model identified as ‘path switching’. It is important to draw the distinction between reciprocal causation and ‘path switching’.
reciprocal causation, more potential causal interactions and alternative pathways are possible, because of the possibility of causal ‘loops’. The possibility of path switching is less of a threat to the assumption of non-recursiveness in the model, because causation is still unidirectional.

Absence Of Competing Frameworks

To date, the only research using the causal model has been led by one or both of the principal authors. In the course of empirical work using this model two versions have been developed, the second version being a close refinement of the first. Alternate competing frameworks might explore the possibility of there being scripted behavior in other pathways, or refine the notion of shocks so that correlations between types of shock and pathway could be tested. They might seek to see if parsimony could be improved, by for example integrating the concept of scripts (as one form of schema) with images (as another type of schema). They might also test for evidence of reciprocal causation or path-switching. Support for the notion of developing alternate frameworks can be found within the literature on employee turnover in Hom, Caranikas-Walker, Prussia & Griffeth (1992), Jaros et al. (1993) and also in James and James’ (1989) meta-analytical review of causal modelling in organizational research;

More effort needs to be given to the development of multiple, competing, *a priori*, models as part of the design of a confirmatory analysis... comparisons of theoretically viable, competing causal models reduces reliance on specification analysis and increases the faith one may have in making causal inferences from a confirmed model (398).
A Theory Should Help In Predicting When And Where Theorized Behaviors Might Occur

There are two principal limitations with using Lee and Mitchell’s model in a predictive sense. Firstly, research to date has relied on retrospective reports, and there is no evidence to date of predictive power, although a series of preventative turnover interventions have been developed in a particular industry (Lee & Maurer 1997). Secondly, the model is principally classificatory, and the conditions for applying the model are restricted to leavers.

Additional considerations relating to predictability are as follows. Elements of the model may apply in cases where people leave, or where people remain in the organization. For example, a positive shock could actually reinforce an individual’s commitment to their organization. Even in cases of negative shock, managers or researchers may readily identify it as such, but may not be able to forecast how it will affect any given individual, or even a base rate measure of turnover. The model does not provide any indications of how to assess interim or precursory behaviors which might indicate an employee were about to leave. The closest to a contribution in this area is perhaps the identification of path 1 quitting, where a shock leads to a near automatic quit. Although this aspect of the unfolding model may be the easiest to identify as a distinct theoretical contribution, this advance seems unlikely to warrant an improvement in predictive power, given that this type of quitting behavior happens over a short time period.

The claims of predictive power relating to use of the unfolding model would seem to relate principally to the benefits of increased understanding of the phenomenon of turnover, although Lee et al. suggest there are, “... multiple and independent ways in which a researcher can assess which path a person takes, and when that path will be initiated and completed...” (1999: 460).
Whilst increasing understanding of turnover is a worthy goal, it may be premature to hope for predictive validity in application of the model. Nonetheless, synthesis with some form of content model may provide an element of predictability, where for example a range of shocks can be identified and characterised, and possibly, where these can be correlated with reasons for staying or quitting. It might also be worthwhile assessing the relative frequency of shock instigated turnover decisions across various industries (ibid.).

Also, as Lee and Mitchell point out, greater understanding of the relative speed of these decision pathways may improve managerial effectiveness. For example, there may be recognition that a particular type of turnover will allow managers more time to deal with it (if it can be identified). Identification of the threat of external shocks may enable organizations to improve internal labour market opportunities, or encourage making information systems more responsive. If predictive power should be a goal of turnover research, it seems strange not to take up the possibility of finding out the reason(s) for people’s decision to quit. A commonsensical, managerialist approach to turnover might well start with the premise, “I want to find out why people are leaving so I can stop it.” Though this may appear naive, and the search for reason(s) is only ever likely to represent part of the task of research into predicting turnover, inclusion of a series of questions relating to why people left could make it easier to ally application of the model with prediction of turnover behavior.

Conclusion

This paper has described and critiqued the unfolding model of turnover in four main sections: scripts, shocks, context specificity and the model as a whole. Although recommendations for
change have been offered, the principal aim has been to structure questions prompted by
preparation for an empirical study whose theoretical focus is the model. The aim is not to ‘graze
on imperfections’, instead it is hoped this theoretical assessment may contribute to a more robust
and equally elegant unfolding model.
REFERENCES


Weiss & Ilgen 1985

FIGURE 1
Lee et al.'s 1999 Unfolding Model of Employee Turnover

Notes:
Only classifies leavers
* = Non-classifiable route which indicates theory falsification