

A longitudinal study of the effectiveness of developmental mentoring

1. Introduction

Mentoring is a dynamic phenomenon, in which each learning relationship is unique. The literature on mentoring is predominantly focused on informal relationships and on what may be described as sponsorship mentoring – a relationship, which involves mainly one-way learning and relies upon the power and connections of the mentor. Yet in Europe, particularly, the dominant model of mentoring (called developmental mentoring) is very different – it emphasises two-way learning, in which power is “parked” and the role of the mentor is to help the mentee with the quality of their thinking. The terms protégé and mentee illustrate the difference in perspective and philosophy (mens = mind, look after v mens = think).

Whether these two models are in fact different constructs or aspects of the same construct has not previously been investigated.

The literature on mentoring is very thin on what happens within the “black box” of the relationship. With few exceptions, studies of mentoring efficacy are limited by examining only one perspective (mentor or mentee); and by lack of longitudinal research methodology. There are also significant problems with instrumentation – the most common measure of relationship outcome is Noe’s (1988) adaptation of Kram’s (1985) functions of a mentor. However, the majority of these functions are not true outcome measures at all, but enablers. Additionally, many quantitative studies are contaminated by basic problems of sample size and conflation of line manager and off-line relationships; or conflation of formal and informal relationships. (Ragins, 1999)

This is the first substantive study of developmental mentoring and the first to demonstrate that developmental and sponsorship mentoring are separate constructs. It takes a longitudinal approach, sampling at three key points in the first 12 months of relationships; and it explores the relationship dynamics simultaneously from the perspective of both mentor and mentee – in terms of their observations of both self and their dyadic partner.

It is structured according to McGrath’s (1994) input-process-output model and involves two halves: development and validation of instrumentation and application to matched dyads in a sample of 8 European organisations.

The study therefore plugs a number of gaps in the mentoring literature: the need for a study specifically of developmental mentoring in structured programmes, for investigation of the variables between inputs and outputs within a longitudinal

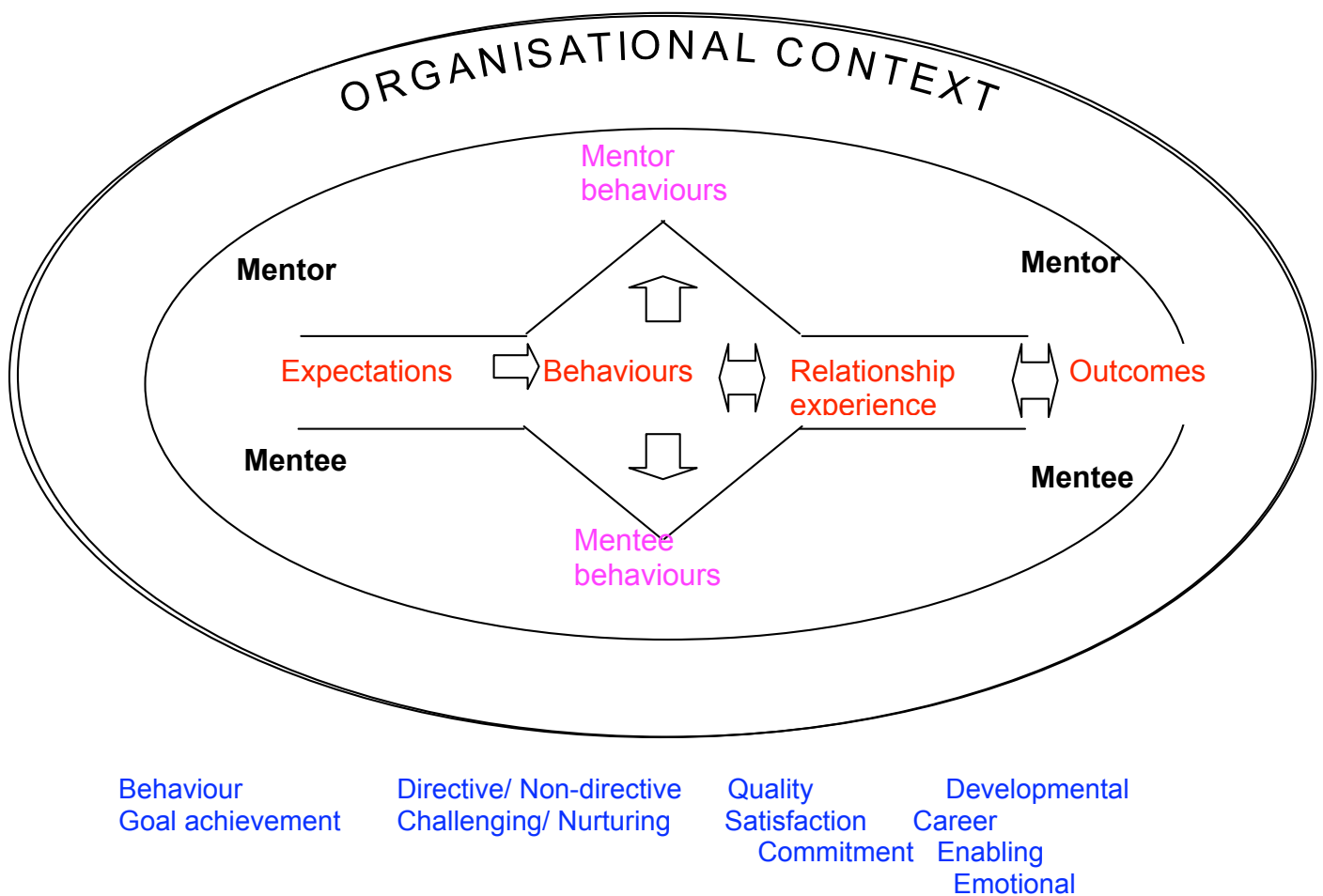
structure; and the creation of instrumentation more robust and relevant than hitherto.

2. Research Design and/or Methodology

The research design is primarily quantitative, with some qualitative. It takes a broadly positivist stance, moderated by qualitative input in design of instrumentation and interpretation of results.

It is built around a process model of the mentoring process as shown in Figure 1 below and derived from a mixture of fieldwork (consultancy in mentoring programme design and participant training) and interpretation of the mentoring and related literature.

Figure 1: A cause – process – effect model of developmental mentoring



Five complex hypotheses emerged from the model:

1. *The higher the perception by mentor and mentee of the level of organisational support for mentoring, the more positive will be their attitudes towards goals within the relationship, their satisfaction with the experience of the relationship, and their perception of positive outcomes*
2. *Expectation of positive developmental behaviours by mentor and mentee towards each other and for themselves will correlate with perception of positive developmental behaviours, with perception of a positive relationship experience, and with positive outcomes for both parties.*
3. *A high level of positive attitudes towards goals by the mentee will mediate mentor and mentee perception of actual positive developmental behaviours and positive outcomes for both parties.*
4. *Perception by mentor and mentee of actual positive developmental behaviours will correlate with positive relationship experience and positive outcomes for mentor and mentee*
5. *Positive relationship experience will correlate with positive outcomes for mentor and mentee*

Part one — scale development

Part one of the research involved the development of instrumentation, where none existed, or where existing instrumentation was inappropriate for the developmental mentoring construct. Noe's instrument, for example, not only has problems -- "over a third of the items failed to significantly load on either the career development or psychosocial factor" (Ragins and McFarlin, 1990) -- but includes many items irrelevant to a developmental mentoring approach.

The instruments I developed were:

- A scale of organizational supportiveness for mentoring. This emerged from a wider range of items selected to address a variety of issues, relating to organizational context, which may be posited to influence mentoring relationship effectiveness.
- Three scales relating to aspects of goal orientation: goal clarity, goal commitment and goal alignment (a common sense of purpose within the dyad, plus a perception of the organisation's purpose)
- Two sets of scales relating to behaviours by mentors and two parallel scales relating to behaviour by mentees. One relates to stretching / nurturing behaviours; the other to directive / non-directive behaviours. Items were selected to represent both sponsorship and developmental mentoring assumptions. The language of these scales was adjusted for perspective: mentor on self and mentee; mentee on self and mentor; behaviours expected (time one, the beginning of the relationship) and behaviours experienced (time two, after six months). The scales that emerged related to mentee self-development/ mentor support for

mentee self-development; mentee self-reliance / mentor support for self-reliance; and mentee openness to counselling / mentor provision of counselling-type behaviours.

- Three scales relating to aspects of relationship experience: relationship quality, relationship satisfaction and relationship commitment. These were used for measurements at times two and three
- Four scales relating to relationship outcomes for both mentor and mentee, used at time three only.
 - Developmental (learning)
 - Career (personal advancement)
 - Enabling (e.g. having a career plan)
 - Emotional (e.g. greater self-confidence)

The research method involved an extensive literature search, both within mentoring and in other related areas of study – coaching, counselling, organizational development, power, social exchange and so on. It also involved gathering potential items through fieldwork in the training and subsequent support of mentors and mentees in European organisations.

These items were developed into questionnaires, which were distributed to current participants in developmental mentoring programmes, at three points in their relationships: beginning, after 6 months and after 12 months. Points two and three were chosen as a reasonable compromise between time enough for the relationship to mature and the likelihood of relationship dissolution. A total of 71 mentors and 68 mentees responded to the questionnaire at time 1; 62 and 64 at time 2; 64 and 55 respectively.

The data was subjected to factor analysis to develop scales, as above. The analyses of behaviours – both expected (time one) and perceived (time two) demonstrated clearly that participants distinguished strongly between those behaviours, belonging to the developmental mentoring construct and those belonging to the sponsorship mentoring construct, with each loading onto separate scales under factor analysis.

Part two – the main study

This part of the study involved matched pairs of mentors and mentees. To reduce contextual variables, participants came from professional and managerial staff in 8 organisations, and all these programmes were broadly compliant with the International Standards for Mentoring Programmes in Employment. The ISMPE standards cover communication of programme purpose, training and support for participants, matching and administrative processes.

Obtaining three point data from individual participants is hard enough, but from both parties in a dyad the task was substantially more difficult. A total of 62 matched pairs was obtained at time ones and two and 28 at time 3 (the same

number as in Kram's seminal study in 1985). T-tests established that there were no significant differences between the respondents, who answered all three questionnaires and those, who answered only the first two.

The data were subjected to omni-directional analysis, using correlation analysis and regression analysis as appropriate.

3. Results and Findings

The analyses did not show a complete chain of cause-process and effect. Table 1 below shows the pattern of support for the five hypotheses.

Table 6.46 Percentage of each hypothesis (proportion of sub-hypotheses) supported by correlations / regressions

Hypothesis	Cross-sectional measures		Longitudinal measures		No. dependent variables
	Self +	Others ++	Self	Others	
1. Organisational support compared with:					
• Mentor and mentee attitudes towards goals (clarity, alignment, commitment)	17%	38%	--	--	12
• Mentor and mentee relationship satisfaction, quality and commitment	--	--	17%	17%	24
• Mentor and mentee outcomes	--	--	38%	0%	16
2. Expectation of own and other parties' behaviours compared with:					
• Perceived actual behaviours by mentor and mentee	--	--	83%	42%	18
• Mentor and mentee relationship satisfaction, quality and commitment	--	--	47%	33%	72
• Mentor and mentee outcomes	--	--	33%	--	24
3. Goal clarity, alignment and commitment compared with:					
• Perceived actual behaviours by mentor and mentee	--	--	28%	--	36
• Mentor and mentee outcomes	--	--	6%	--	24
4. Perceived actual behaviours by mentor and mentee compared with:					
• Mentor relationship satisfaction, quality and commitment	--	--	28%	53%	{54
• Mentee relationship satisfaction, quality and commitment	--	--	89%	78%	{54
• Mentee outcomes	--	--	100%	43%	24
• Mentor outcomes	--	--	0%	0%	24
5. Mentor and mentee relationship satisfaction, quality and commitment compared with:					
• Mentor outcomes*	--	--	50%	29%	54
• Mentee outcomes*	--	--	100%	71%	54

• includes cross-sectional and longitudinal comparisons

+ individual reporting on own behaviours, goals, relationship satisfaction etc

++ individual reporting on their perception of the other person's behaviours etc

Hypothesis one is not proven. Neither longitudinal nor cross-sectional measures showed any significant levels of correlation between organisational supportiveness for mentoring and relationship experience, behaviours or outcomes. It appears that the effective developmental mentoring relationship may be relatively self-contained and immune to external influences. This study explores only one contextual variable – organisational support. It is likely that other variables, such as amount and quality of participant training, will have a measurable impact.

Hypothesis two: The data show moderate support for an association between self-reported expectation of own behaviours and self-report of own actual behaviours. Mentee expectations of mentor behaviour and vice versa are also closely correlated, but not with perceptions of the dyadic partner's actual behaviours. There were, however, in addition, interesting associations between mentee and mentor expectations of their dyadic partners' and their self-report of their own behaviours.

Hypothesis three is not supported in relation to goal clarity and goal commitment being associated with positive behaviours or outcomes, for either party. However, self-report of goal *alignment* by the mentee correlates with all three elements of relationship experience; and mentor self-report of goal alignment correlates with relationship commitment. None of the goal constructs correlates with outcomes.

These results contradict the assumption that specific (SMART) goals at the beginning of the relationship are important to goal achievement. My analysis, supported subsequently by Megginson (2007) suggests that goals in mentoring and coaching are most achievable when emergent and that solidifying goals too early may be dysfunctional.

Hypothesis four was broadly supported. Positive relationship experience is dependent on participants' perceptions of their own and each other's behaviours. Mentees' perceptions of their own behaviours at time 2 are highly correlated with mentee outcomes; as are mentee perceptions of mentor actual behaviours. However, mentor behaviours, as observed by either party, are not closely associated with outcomes for either party. The mechanisms that drive mentor and mentee outcomes appear from my analysis to be different and complex.

Hypothesis five is strongly supported for mentees and moderately supported for mentors. Strong associations between mentor and mentee relationship experience and developmental outcomes confirm studies that emphasise mutual learning as a characteristic of effective mentoring (Allen et al 1999).

4. Discussion

Strengths of the research

The key strengths of the research include:

- The degree of triangulation, with variables examined from both mentor and mentee perspectives with respect to themselves and to each other. (This was particularly useful in preventing false conclusions about scales and correlations – a clear pattern had to be shown across the majority of data sets, before an association could be established.)
- The longitudinal nature of the study, which overcomes the problems of post-hoc recollection of experience. (However, I could not ensure that all relationships were at exactly the same point in evolution at the point of measurement and this may have influenced results. This is an issue for further application of the research method.)
- The focus on one approach to or model of mentoring, rather than an (unevidenced) assumption that all mentoring approaches are the same.
- The creation and testing of new instrumentation, designed specifically to assess the chain of cause-process-effect within mentoring.

Limitations of the study

As with any complex analytical endeavour, the study has limitations. It proved very difficult to obtain matched pair samples in the number required for statistical analysis, to the extent that regression analysis was not possible on those participants, who responded at all three time points.

The complexity of the data meant that some potential variables (for example, job commitment) which could be posited to influence the mentoring process, had to be omitted.

This study examined mentoring for a specific audience in a specific cultural context. It may not apply generically to all audiences or all cultural contexts.

Implications for practice

The implications of this study for practice are substantial. In particular:

- It provides a valid and practical method of monitoring the quality of / troubleshooting the mentoring relationship and programme. A range of organisations now track this data online. The system (called MDS on-line – for Mentoring Dynamics Survey) also allows them to benchmark their programme against all others in the database.
- It frees up mentors from “goal tyranny” – the confining expectation that they must set and work to specific goals. Goals can now be seen as emergent phenomena.
- It enables more effective management of participation expectations of their own and each other’s behaviours, by clarifying the sponsorship/ developmental split

From a research perspective, the study has:

- Provided a basis for future study of the developmental mentoring phenomenon, as distinct from sponsorship mentoring
- Created and validated instrumentation, most of which can be (and is being) used in further studies of both constructs. The measures of outcomes are especially valuable, as this has been a major gap in the literature on mentoring effectiveness, with previous scales measuring a mixture of outcomes and (assumed) enablers.
- Begun the process of understanding the “black box” of mentoring – what happens within the relationship to make it effective. Previous studies have focused on receipt of mentoring functions by the mentee/ protégé and in a few cases on the benefits to mentors. (REFS) However, this is the first substantive attempt to examine in detail *how* the expectational and behavioural interactions between mentor and mentee determine outcomes of the relationship, for both parties.
- Explored a basic cause-process-effect model of developmental mentoring, which can be refined in future studies. In particular, larger scale studies of specific links in the chain, and examination of additional variables, with two point longitudinal research designs, may develop a deeper understanding of the influences at work in shaping relationship experience and outcomes.
- Demonstrated the complexity and individuality of mentoring relationships, which calls into question the positivist emphasis of much of the previous literature. This argues for an emphasis of future studies, building on the framework of this study, to be either qualitative or mixed qualitative and quantitative.

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