

The role of interpersonal affective regard in supervisory performance ratings: A literature review and proposed causal model

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A literature review reveals that supervisors' positive affective regard ('liking') for subordinates is associated frequently with higher performance appraisal (PA) ratings, and with other findings such as greater halo, reduced accuracy, a better interpersonal relationship, and a disinclination to punish poor performance. However, the interpretability of the empirical literature is weakened by a number of conceptual and methodological problems. Moreover, most investigators have simply assumed that the effects of liking constitute sources of bias in PAs, and the causal nature of the observed relationships needed to be clarified. Based on the review, nine causal hypotheses constituting a model of 10 latent constructs with 17 paths are presented. Each direct effect is characterized as representing either a relevant (valid) influence, a source of bias, or as biased/valid contingent on the particular indicator or circumstances. Suggestions are made for integrating the model with a developmental approach, and implications are drawn for employment test validation and the investigation of test bias.

For the past 30 years the nature of PA research has been shaped by the 'cognitive revolution' in the social and behavioural sciences (cf. Neisser, 1967), resulting in a reconceptualization of performance ratings as a complex information-processing task. Models of the appraisal process were promulgated which emphasize the role of the appraiser as a rational information processor—although the models acknowledge, to some extent, the importance of non-cognitive factors (DeNisi, Cafferty, & Meglino, 1984; Feldman, 1981; Ilgen & Feldman, 1983; Landy & Farr, 1980). But considerable evidence was also accumulating to the effect that PA evaluations are influenced by a host of affective, motivational, and interpersonal factors.

The purposes of this paper are to (i) review the literature regarding supervisor interpersonal affect and PAs; (ii) specify, by means of a causal model induced from that literature, the proximal influences relating supervisors' interpersonal

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affective regard (liking) and PA ratings; (iii) consider the bases under which liking may or may not be considered a source of criterion contamination (bias) in real administrative PAs; and (iv) provide a structure and suggestions for future research.

The role of affect in appraisal

The importance of the role of affect in human judgment is indicated by Zajonc's (1980) assertion that 'contemporary cognitive psychology simply ignores affect. The words *affect*, *attitude*, *emotion*, *feeling*, and *sentiment*, do not appear in the indexes of any of the major works on cognition . . .' (p.152). Similarly, Dipboye (1985) emphasized that laboratory 'passive observer research procedures have led researchers and theorists to overemphasize cognitive determinants and neglect behavioral, affective and social determinants of biases in subjective appraisals' (p.116).

Zajonc (1980) notes that affective reactions are often involuntary and effortless, as well as irrevocable because of their 'subjective validity'. If we acknowledge that 'affect dominates social interaction' and that 'quite often "I decided in favor of X" is no more than "I liked X"' (Zajonc, 1980, pp.153, 155), the relevance of PAs is apparent. When supervisors are asked to judge the performance of their subordinates the task likely arouses involuntary, perhaps unconscious affective reactions to those subordinates and to the task. Those affective reactions may even be detached from the cognitive content with which they were originally associated, and may be 'justified' *ex post facto* by the supposedly rational and accurate appraisal ratings.

Relevant research has also been produced by social psychologists studying people's relative popularity. For more than 25 years, this work has been dominated by the construct of interpersonal attraction, and the study of its determinants (Byrne, 1971). Some generalizations from this literature are that (a) there are individuals whom nearly everyone likes or dislikes, but there is little consistency of judgment about most people, and (b) significant determinants of liking include positive trait characteristics, physical attractiveness, and perceived similarity (Burt, 1982; Lindzey & Byrne, 1968; Newcomb, 1961; Park & Flink, 1989). Perhaps the most well-documented findings are the positive effects of *similarity* between people (similarity of opinions, attitudes and values; pastimes; motivation and other personality attributes; reciprocity of liking; compatibility of roles; socio-economic status and biosocial attributes like age, sex, ethnicity, and level of education (Duck, 1973; Huston, 1974; Kelly, 1979; Werner & Parmelee, 1979)).

Organizational behaviour (OB) researchers have recently adopted the same focus on interpersonal similarity, applying it to the formal role relationship of supervisor and subordinate. One study has documented positive effects of similarity of biosocial attributes on both supervisory PAs and degree of liking for subordinates (Tsui & O'Reilly, 1989). However, research findings have not been uniformly positive (Lefkowitz & Battista, 1995; Lefkowitz, Howard, Lawrence, & Nicolopoulos, 1998; Liden, Wayne, & Stilwell, 1993; Riordan & Shore, 1997).

The empirical literature concerning supervisor liking and performance appraisals

Twenty-four studies were found concerning the relationship between supervisors' affective regard for subordinates and their PA ratings.¹ In general, the conclusions that may be drawn from the studies are that a rater's affective regard for a ratee is associated frequently with such correlates as higher ratings, a higher quality relationship, less inclination to punish poor performance, and greater halo and less accuracy. While the association between liking and ratings does not always occur (cf. Lefkowitz *et al.*, 1998), it may hold even when ability or objectively measured job performance is controlled (cf. Harris & Sackett, 1988; Wayne & Ferris, 1990, Study I). There is some evidence that liking is impacted by subordinate impression-management behaviours (cf. Wayne & Ferris, 1990; Wayne & Liden, 1995) and influence tactics (Ferris, Judge, Rowland, & Fitzgibbons, 1994), and sometimes by degree of similarity between employee and supervisor (Wayne & Liden, 1995)—but not always (Lefkowitz *et al.*, 1998). In virtually all of the studies, including those that used neither controlled experimentation nor path analyses, the findings have been interpreted causally as illustrating the impact of affect on the ratings.

The validity and generalizability of the relationship between supervisor liking and PA ratings is enhanced by the relative consistency of the findings despite the multi-operationalization of the dependent variable (DV). (Similar variability in the operationalization of the independent variable, affect, however, represents confusion and is discussed below.) Four categories of DVs were employed more than once across the 24 studies (the extent of usage is comparable for the field studies and laboratory simulations): favourability of performance ratings was used 19 times; used five times was an assessment of the likelihood of contingent actions by the supervisor (punishment, merit pay recommendations, promotability assessments); aspects of the quality of the supervisor–subordinate relationship were used four times; and supervisors' attributions regarding the causes of performance was used twice. Also employed once each were rating accuracy, rating errors, role clarity, and employee aptitude (as a possible antecedent of liking).

The acceptability of the conclusions summarized above are threatened by a number of theoretical and methodological problems which characterize this domain of research. Consequently, in the context of this review of the literature, the following six criticisms should be considered.

(1) Multiple and inadequate definitions of the independent variable

Six conceptualizations and associated operationalizations of interpersonal affective regard, or 'liking', have been employed. Fifteen studies used direct ratings by supervisors or other raters of their liking for ratees (whether actual employees, experimental participants, or 'paper people'). Direct rating questions have been shown to have adequate construct validity in interpersonal attraction research

¹ Each study is marked with an asterisk in the References section below; two asterisks indicate that two studies are reported. A table summarizing the research design and results of each study is available from the author.

(Berscheid & Walster, 1978; Rubin, 1973). The four single-item measures (used by Cardy & Selvarajan, 1998; Dobbins & Russell, 1986, Study II; Harris & Sackett, 1988; Lefkowitz & Battista, 1995) appear to have worked as well as the multi-item scales. Moreover, the greater reliability of multi-item scales can be negated by interpretive difficulties stemming from the ambiguous meaning of a composite measure (see (2) below).

The other nine studies measured 'liking' indirectly, inferring it from a variety of other measures. For example, three studies inferred it from the degree of 'similarity' between supervisor and subordinate, but used rather different indicators of similarity. Pulakos and Wexley (1983) used a single-item direct rating of the extent to which 'my subordinate and I are similar kinds of people'. Turban and Jones (1988) investigated two dimensions that assessed *perceived* similarity in outlook, and one that assessed demographic similarity. Turban, Jones, and Rozelle (1990) manipulated the degree of positive or negative personality traits and the extent of similar/dissimilar responses to an attitude questionnaire of (bogus) subordinates.

Three studies inferred liking by manipulating more and less likable (or liked) descriptions of hypothetical subordinates. For example, Cardy and Dobbins (1986) and Dobbins and Russell (1986, Study I) manipulated the *likableness* of hypothetical ratees by means of describing them with more/less 'favorable or desirable' adjectives. A weakness of this approach is suggested by the finding that people differ in the weight they give to such personal attributes in judging liking (Park & Flink, 1989). However, 'manipulation checks' indicated that the manipulations were effective (at the level of group comparisons). On the other hand, 'paper people' were used as ratees, which may not be sufficiently salient to elicit such individual differences among raters. Mitchell and Liden (1982, Study I) also used bogus ratings, supposedly by peers of the ratees, of the extent to which ratees were liked and thought friendly and pleasant.

The remaining three studies inferred 'liking' from subordinate ratings of the quality of the dyadic relationship (Alexander & Wilkins, 1982), from supervisor ratings of ratees' popularity in the work-group (Mitchell & Liden, 1982, Study II), and from ratings of 'friendliness' made by supervisors other than those giving the PA ratings (Borman, White, & Dorsey, 1995). There are problems with each of these. Mitchell and Liden's (1982) Study II was conducted in the military; and in cohesive groups or when peers are highly 'task-identified' (both likely in the military) popularity is likely to reflect the person's task proficiency (Kane & Lawler, 1978). Borman *et al.* (1995) avoided the same-source method variance problem by having liking and performance ratings each made by a different supervisor. But this means that there was no measure of the performance-rating supervisors' liking for subordinates.

It is apparent that this body of research suffers from a lack of agreement on the definition and measurement of the construct of interest. At the very least, a conceptual distinction should be maintained between the supervisors' affective regard for a ratee and its likely antecedents, including the ratee's dispositional attributes such as 'likability'. Similarly, inferring liking from perceived similarity between supervisor and subordinate or from the quality of their relationship also confuses the construct (liking) with its antecedents and/or consequences. In the

interests of parsimony, simple direct question(s) of the sort. 'How well do you like this person?' can probably serve best a variety of research purposes.

(2) Construct contamination in the measures of affective regard

Even among studies that employed the same type of operationalization of interpersonal affective regard, e.g. direct questions, the content domains of the measures varied considerably. And some of the contents are contaminated by referents to work-related behaviours. For example, although three of the four items used by Wayne and Ferris (1990, Studies I and II) appear to be substantively in the domain of liking/friendship, one item, 'Supervising this subordinate is a pleasure', may reflect other influences such as job performance. (Later studies by these authors do not include this item.) Similarly, the three-item scale employed by Tsui and Barry (1986) includes ratings of the supervisors' admiration and respect for the ratees, which might in part reflect evaluations of the ratees' competence and/or job performance. Measures of rater affect should be free from sources of variance related to employee performance because the question frequently under investigation is the extent of empirical relationship between the two.

Some investigators have tried to ensure that the supervisor's judgment of 'liking' is devoid of performance influences. Cardy and Dobbins (1986) and Dobbins and Russell (1986) pre-screened for an absence of performance implications the trait adjectives used to manipulate likableness; and the single-item rating used by Lefkowitz and Battista (1995) emphasized that the rating should reflect 'personal feelings' toward employees 'regardless of their work performance'.

Robbins and DeNisi (1994) present an opposing viewpoint, suggesting that in field studies 'it may be impossible to separate completely the effects of [supervisor] affect from [employee] past performance' so that 'much of the variance that can be attributed to affect can be explained just as well by examining past performance' (p.351). That is consonant with Cardy and Selvarajan's (1998) experimental evidence of the inseparability ('integrality') of the two. But the correlations that Robbins and DeNisi observed between past performance perceptions and performance-linked affect ($r = .42$) and social affect ($r = .35$) suggest that there is considerable variance remaining to be explained, and the indication of 'integrality' used by Cardy and Selvarajan was response latency in making the PA ratings, not affect-based bias in the ratings. Moreover, Lefkowitz *et al.* (1998) observed in a field study that supervisors displayed affective preferences for subordinates which did not get reflected in their performance ratings of those subordinates.

(3) Same-source common method variance in measures of affective regard and PA ratings

Since Campbell and Fiske's (1959) explication of the common method variance problem more has been learned (cf. Paglis & Williams, 1996; Sackett & Larson, 1990, pp. 473-475). The issue has been well defined by Podsakoff and Organ (1986): 'the most critical problem in the use of self-reports is identifying the potential causes of artifactual covariance between self-report measures of what are

presumed to be two distinctly different variables' (p.534). A potential remedy that has received attention in the literature does not appear to be applicable here. Campbell and Fiske's (1959) multitrait–multimethod matrix (MTMM) technique (cf. Spector, 1987; Williams, Cote, & Buckley, 1989) is not applicable because there is no adequate alternative source (i.e. method) for assessing supervisors' affective regard for subordinates: i.e. 'there is no direct means of cross-validating people's descriptions of their feelings or intentions' (Podsakoff & Organ, 1986, p.533).

Several of the studies reviewed attempted to deal with the problem, such as the use of different supervisors for the ratings of performance and liking (Borman *et al.*, 1995). Unfortunately, this procedure seems unsatisfactory because the performance-rating supervisor's liking for appraisees remains covert and its potential influence unexamined. Ferris *et al.* (1994), using confirmatory factor analysis, observed that a hypothetical single- (i.e. methods-) factor model fitted their data significantly less well than the model based on the substantive constructs, leading them 'to interpret the relations between the variables as structural relations' rather than 'simply alternative measures of an overall affective construct' (p.122). However, only three of the eight variables factored were based on supervisors' attitudinal self-reports, which are the only 'variables of interest' (cf. Podsakoff & Organ, 1986, p.536).

Wayne and Liden (1995), in a study that represents the only truly longitudinal investigation, obtained an assessment of liking after 6 weeks on the job, and performance ratings after 6 months, thus lessening the likelihood of spurious covariation from the common source. Similarly, Lefkowitz and Battista (1995) obtained two sets of PA ratings—for specific performance dimensions based on a job analysis, and global ratings—both obtained 1 month and 5 months after employees were hired. They used partial correlation and analysis of covariance, controlling for the covariation of one set of PA ratings in the association between liking and the other set of PA ratings. Although the partial correlations remained significant at both time periods, it was acknowledged that this was an 'overcorrection' insofar as relevant construct covariation between the two sets of PA ratings was being partialled out along with the common method variance.

(4) Lack of psychological fidelity to PAs in organizations

PA research is a domain in which the issue of the 'external validity' of laboratory simulations to 'real' appraisal situations in the field has been raised frequently (cf. Bernardin & Villanova, 1986; Cardy & Dobbins, 1994). One point of view is represented by Dipboye's (1985) position that field settings are more likely to evoke strong liking or disliking for an employee than are laboratory studies because of the face-to-face interaction and existence of greater motivational pressures. Similarly, Dobbins and Russell (1986) suggest that liking will more likely play a role in supervisors' performance attributions because of the greater ambiguity of field settings. On the other hand, Bernardin and Beatty (1984) assert that liking may have less impact in the field because supervisors are more likely to have information regarding employees' performance. Consistent with that view is the suggestion by Varma, DeNisi, and Peters (1996) that the affect–ratings relationship may be

exaggerated by laboratory findings in which ratees have no past performance. My own opinion is that both views may be correct. Inter-organizational (and perhaps inter-departmental) differences in culture, climate, human resources practices, and the structure of work might be reflected in differences in the relative salience of liking and true performance as determinants of PA ratings, thus resulting in greater *overall variability* of ratings made in the field than in the laboratory. And the complexities may be exacerbated considerably if Robbins and DeNisi (1994) are correct that actual PA ratings and supervisor affect are 'hopelessly confounded' (p.352).

The empirical findings from the studies reviewed offer no resolution to the disagreement: the eight simulation and 16 field studies produced comparable findings. This suggests that the two types of studies share an 'essential similarity' (Locke, 1986)—probably the *psychological meaning* that the situation(s) have for the research participants, rather than their surface characteristics (Berkowitz & Donnerstein, 1982). Virtually all of the research reported—both simulation and field studies—has been conducted under conditions that appear to be psychologically inconsequential to the raters, and also known by them to be inconsequential to the ratees, or only hypothetical in nature. Ironically, then, having this essentially similar, relatively meaningless psychological reality in common may be what accounts for similar research outcomes from the two paradigms.

(5), (6) Decontextualized nature of the ratings, and reliance on cross-sectional research

Until recently, most of the studies failed to acknowledge the organizational, social, historical, or emotional contexts within which performance appraisals are made, thus contributing to their lack of psychological fidelity and external validity. As Bernardin and Villanova (1986) point out, in real organizations 'life goes on after the performance appraisal' (p.44). Perhaps even more important, life has preceded it as well. There exist many antecedent and contextual variables that may impact supervisor liking and/or moderate the impact of such liking on current appraisal ratings, not the least of which are the past performance histories of the employees being rated. As aptly noted by Judge and Ferris (1993), 'rating is a process with multiple social and situational facets that need to be considered simultaneously' (p.80). Exploration of the antecedents of rater liking is necessary to determine whether any liking—ratings relationship represents bias. Recent work (Borman *et al.*, 1995; Ferris *et al.*, 1994; Lefkowitz *et al.*, 1998; Wayne & Ferris, 1990; Wayne & Liden, 1995; Wayne, Liden, Graf, & Ferris, 1997) has, in fact, emphasized the role of interpersonal factors in PA ratings, such as subordinate impression management behaviours and upward influence strategies, supervisor—subordinate similarity on a number of attributes, and perceived subordinate characteristics like social skills.

Even among studies that have focused on the interpersonal and social contexts of PAs, only few have considered the historical—organizational context, as noted earlier by Bernardin and Villanova (1986). Aside from those few, the omission is reflected in the absence of longitudinal research concerning the developmental processes whereby supervisors come to like their subordinates. This is not surprising, given the paucity of longitudinal field research in the study of

organizational behaviour generally (Sackett & Larson, 1990, pp.443, 461). The only truly longitudinal investigation uncovered was Wayne and Liden's (1995) structural equation modelling study in which antecedent variables (subordinate impression management and demographic attributes), mediating variables (supervisor's liking and perceived similarity to subordinate), and the outcome measure (PAs) were obtained at different time periods ranging from 5 days to 6 months after hire. Their temporal ordering of the data allows us to conclude that demographic similarity and supervisor-focused impression management behaviour influenced supervisor liking. Lefkowitz and Battista (1995) obtained PA and liking ratings at two time periods, 1 month and 5 months after employees were hired, and were able to infer from the follow-up data that 'over the first few months of employ work performance becomes a salient determination of both performance appraisals and supervisors' personal regard for their subordinates' (pp.408–409).

Proposed causal hypotheses

There are four classes of variables related directly to the two focal variables of supervisors' affective regard for subordinates and the appraisals of those subordinates' job performance—the antecedents and consequences of each. Those about which we appear to have some knowledge are: employees' performance in their work or job role; their behaviour in the work setting outside the domain of tasks and duties constituting the job role; the quality of supervisor–subordinate relationships; situational or context effects at the time the appraisal(s) are made; organizational rewards as a consequence of favourable performance evaluations; similarity of the subordinate to the appraising supervisor; and personal attributes of the ratee/subordinate that underlie his/her behaviour at work. These personal attributes include those that are likely to be relevant to role and/or extra-role performance in a particular job, as well as those that are likely to not be relevant. I have not included in the model the impact of *rater* dispositional attributes (aside from their contribution to supervisor–subordinate similarity) because there is little documentation of their biasing appraisals, as opposed to degrading the accuracy of ratings.

Proposed below are nine hypotheses, comprised of 10 variables and 17 causal paths. They are conceptualized as latent constructs because each represents a large domain comprised of many constituent variables, with many potential indicators. The hypotheses are stated and explained below. Obviously, these nine hypotheses do not exhaust all possibilities, and the model might be expanded by including additional potentially relevant antecedents and consequences of the two focal variables (liking and appraisal). However, the proposed composite is a parsimonious 'core' model comprised of proximal variables which are fairly well represented in the OB literature.

It is unlikely that all 10 domains can be assessed adequately in any single empirical study, but specifying a prototype latent model has heuristic advantages over the necessarily more modest causal models that have been tested empirically and reported in the literature (Borman *et al.*, 1995; Ferris *et al.*, 1994; Judge & Ferris,

1993; Wayne & Ferris, 1990, Study I; Wayne & Liden, 1995; Wayne *et al.*, 1997): in most of those instances the investigators were constrained by sample sizes from positing many of the potential causal paths hypothesized here, including reciprocal influences (all the models tested were recursive); with one exception, no objective measures of performance were available at the field research sites, so actual (i.e. job-role) performance was not included in any of the models tested; some of the specific variables of interest to those investigators can be subsumed within the broader latent constructs of the core model; and explicit consideration can be given to whether each direct and indirect effect represents a valid or biased source of variance in the appraisals, and the cumulative impact of each can be compared. The model is integrated explicitly within a developmental perspective as it purports to represent the processes characterizing a 'mature' supervisor–subordinate relationship. The hypotheses are presented in inverse causal order, specifying first the most proximal antecedents of the outcome variables of performance ratings and job rewards.

Hypothesis 1

Contextual or situational effects at the time of rating influence the appraisals made (Fig. 1, Path 17). A far-from-exhaustive list of context effects could include: the purpose for which the appraisal is made (Williams, DeNisi, Blencoe, & Cafferty, 1985); the appraiser's mood at the time of making the appraisals (Isen & Barron, 1991; Sinclair, 1988); the appraiser's ulterior political motives (Longenecker, Sims, & Gioia, 1987), his/her liking for one subordinate affecting the ratings given other subordinates (Mitchell & Liden, 1982, Study I); 'contrast effects' of supervisor having just previously rated good or poor performers (Kravitz & Balzer, 1992); the ratee's prior performance (Smither, Reilly, & Buda, 1989); and the appraiser's *a priori* expectations and/or stereotypes regarding an individual's performance (Stone & Ryer, 1992; Williams, DeNisi, Neglino, & Cafferty, 1986). Interpersonal aspects of the ratings context are implicated by findings that PAs may be influenced by the appraiser's awareness of the level of ratees' job satisfaction (Smither, Collins, & Buda, 1989), and by attitudes of the ratee: liking for and trust in the rater, perceived quality of their relationship, and performance evaluation of the rater (Lefkowitz *et al.*, 1998). Murphy and Cleveland (1991) present a coherent analysis of environmental and organizational context effects on PAs.

Although all of the above examples represent instances of biasing effects, there may be contextual effects that enhance the validity and/or accuracy of appraisal ratings, e.g. use of contemporaneously made diary entries of employee performance. Consequently, whether context effects represent bias is contingent on the particular factor(s) considered.

Hypothesis 2

Supervisors' affective regard (degree of liking) for ratees impacts directly performance ratings and supervisor-influenced rewards (Fig. 1, Paths 14 and 15). *The appraisal also influences directly*

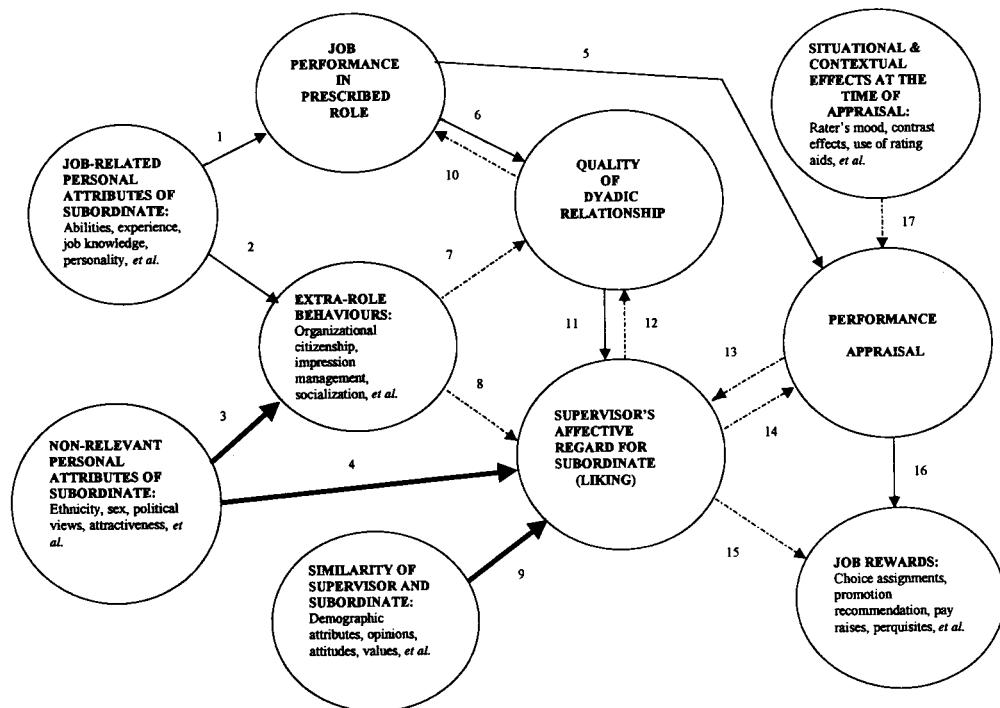


Figure 1. Generalized latent model of the interpersonal determinants of performance appraisal ratings for a mature supervisor-subordinate dyad, indicating which causal influences may be considered relevant sources of variance (solid arrow), which represent bias (thick arrow), and which are either biased or relevant depending on the specific indicator or circumstances (broken arrow).

the distribution of organizational rewards (Fig. 1, Path 16). Supervisors may evaluate subordinates' work performance and reward them based on the extent to which they like each employee—*independent* of the subordinate's actual job role performance or capabilities (Bernardin & Villanova, 1986). This could occur through the influence of like and dislike schemata which structure the processing of performance information (i.e. affect-influenced selective attention, storage, and/or recall of positive or negative performance), and positive performance attributions which mediate the liking→ratings causal relationship (Cardy & Dobbins, 1994). Robbins and DeNisi (1994) confirmed experimentally that the influence of affect on PA ratings can occur via the impact of affect on the rater's encoding and weighting of ratee performance incidents. Indirect support is offered by findings that interpersonal affect influenced performance ratings even when objective performance level or employee ability was partialled out (Harris & Sackett, 1988; Lefkowitz & Battista, 1995, respectively), and that performance ratings are frequently not correlated significantly with objective indices of performance (Alexander & Wilkins, 1982; Hogan, 1987; Kipnis, Schmidt, Price, & Stitt, 1981). Viewed in isolation, most of these examples (Path 14) can be considered manifestations of supervisor bias or criterion contamination, as would supervisors' distributions of

differential rewards to subordinates, such as recommendations for promotion (Wayne *et al.*, 1997), when determined by these influences (Path 15). However, the supervisor's affective regard may also be based on the employee's job performance and work-related extra-role behaviour; those influences on PA and reward distribution, via the compound Paths 5–13–14, 5–13–15, 7–11–14, 7–11–15, 8–14, and 8–15 are at least partially relevant. Therefore, whether liking represents a source of bias may be indeterminate: conditional on the relative salience of these various antecedent influences.

Hypothesis 3

Supervisors' ratings impact their liking for each subordinate directly (Fig. 1, Path 13). This potential effect has never been investigated directly, although it could be brought about by attitude shaping as a result of the supervisor's motivation to achieve cognitive consistency—the rater's beliefs and feelings changing in accord with his/her evaluations (Korman, 1970). Zajonc (1980) points out, moreover, that 'at least three social-psychological conceptions labeled "cognitive" consistency theories focus not on consistency of content but on the consistency of affect' (p.155). Whether this represents bias is indeterminate. If the appraisal ratings reflect primarily each employee's job performance, then the causal path from ratings to liking is largely 'appropriate'. If primary determinants of the ratings include factors that are not performance-based (e.g. sex identity, labour union advocacy), the ratings→liking path constitutes bias.

Hypothesis 4

Degree of similarity of the subordinate to the supervisor influences directly the degree to which the subordinate is liked by the supervisor (Fig. 1, Path 9). This is one of the frequent findings of social-psychological research on interpersonal relations, and the attributes observed to have this effect include opinions, attitudes, values, roles, economic status, and personality characteristics (Duck, 1973; Pulakos & Wexley, 1983). Organizational research has also shown that demographic similarity is a salient factor (Ferris *et al.*, 1994; Lefkowitz *et al.*, 1998; Tsui, Egan, & O'Reilly, 1992; Tsui & O'Reilly, 1989; Wayne & Liden, 1995), as well as similarity in the ways in which each member of the dyad views their relationship and the extent to which they like and trust each other (Lefkowitz *et al.*, 1998). Supervisor–subordinate similarity represents an indirect source of bias in performance ratings, via its impact on supervisor liking.

Hypothesis 5

Subordinates' extra-role behaviours impact directly the quality of their relationships with their supervisors and the degree to which they are liked by their supervisors (Fig. 1, Paths 7 and 8). Extra-role behaviours are those which fall outside the domain of specified job/task performance, but may include some with potential performance implications

(Smith, Organ, & Near, 1983). For example, 'organizational citizenship behavior' (OCB) may facilitate better job performance by others and enhance group effectiveness, and experimentally manipulated levels of OCB have been shown to influence PA ratings (Werner, 1994). Other extra-role behaviours, such as 'impression management' attempts directed by employees towards their supervisors, may have little if any relevance to work-role performance, although they may influence supervisor liking (Wayne & Ferris, 1990; Wayne & Liden, 1995). Consequently, because of the contribution to unit performance, one could consider as valid the appraisal ratings that are impacted by degree of liking due to positive employee OCB. Conversely, rating influences determined by impression management antecedents with little or no performance implications, are contaminants.

Hypothesis 6

Supervisors' liking influences the quality of supervisor–subordinate relationships, which influences employee job-role performance which, in turn, gets reflected in performance ratings (Fig. 1, Paths 12, 10, and 5). The quality of supervisor–employee relationships is manifested, in part, by the extent of work-facilitating, supportive, and affiliative behaviours of the supervisor which contribute to the employee's becoming a member of the supervisor's in- or out-group (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986). This is likely to influence the subordinate's work-role performance in a variety of ways which get reflected accurately in consequent PAs. Whether this represents bias is an interesting question the answer to which seems debatable. If one considers only the immediate performance→ratings link (Path 5) the ratings are relevant insofar as they are accurate reflections of job performance. On the other hand, to the extent that the relative effectiveness of employees' job performance have been differentially facilitated or made more difficult by the supervisor, the ratings may be considered self-fulfilling biases (Eden & Shani, 1982). The paths from liking to quality of relationship (Path 12) and from there to role performance (Path 10) may represent legitimate or biased influences depending on the degree to which affective regard is based on relevant or irrelevant sources such as are represented by Paths 1–6–11, 2–7–11, 2–8, 3–7–11, 3–8, and 4.

Hypothesis 7

Employee job-role performance impacts directly supervisor performance ratings, and independently also impacts the quality of the supervisor–subordinate relationship, which influences supervisor liking (Fig. 1, Paths 5, 6, and 11). In this hypothesis, the appraisal ratings are valid and the (non-causal) association between supervisor liking and ratings is spurious. This view reflects findings supporting the notion that supervisors' affective regard for and behaviour towards subordinates is influenced by the subordinates' actual job performance (Lowin & Craig, 1968; Varma *et al.*, 1996), and that the quality of leader–member exchange relationships influences supervisors' degree of liking for subordinates (Dansereau *et al.*, 1975; Turban & Jones, 1988). Even so, if the work-related basis for the supervisor's liking of the subordinate (e.g. 's/he's very

pleasant to have in the department, and is very honest') does not correspond to the PA rating dimensions impacted (e.g. individual productivity, *et al.*), then such impact may be viewed as a source of criterion bias or contamination (illusory halo). Wayne and Ferris (1990), in a laboratory simulation, confirmed direct causal links from objective job performance to liking and to performance ratings, and from liking and performance ratings to leader-member exchange quality. (No test was made of the obverse exchange quality-to-liking causal link hypothesized above.)

Hypothesis 8

Job-relevant personal attributes of employees affect their work-role performance as well as their extra-role performance (Fig. 1, Paths 1 and 2). One hardly needs to document the extent of empirical data (e.g. selection test validity evidence) illustrating that abilities, job knowledge, motives, and other personality attributes frequently predict future job performance (Barrick & Mount, 1991; Borman *et al.*, 1995; Schmidt, Hunter, & Outerbridge, 1986). Recent research on extra-role performance such as OCB also reveals determinants in the personal attributes of employees (Smith, Organ, & Near, 1983). These represent valid sources of indirect influence on performance ratings.

Hypothesis 9

Non-job-relevant personal attributes of employees affect their extra-role behaviours and the extent to which they are liked by their supervisors (Fig. 1, Paths 3 and 4). Among the personal attributes on which liking for another is based may be included attributes with no apparent relevance to job performance. These include elements of personality (Altman, 1974; Duck, 1973; Kelly, 1979), which may be reacted to by supervisors based on whether they confirm or contradict their job stereotypes, independent of work performance (Longenecker, Jaccoud, Sims, & Gioia, 1992). Non-relevant extra-role behaviours may also be a source of positive or negative regard for the employee (e.g. supervisor-focused impression management attempts). These determinants of liking clearly represent potential sources of bias in PAs.

Composite model

Combining all nine hypotheses results in a nonrecursive model consisting of the 17 causal paths presented in Fig. 1. Note should be taken of the three pairs of reciprocal causal relations. It is postulated that (i) a supervisor's affective regard for subordinates influences how he/she treats each of them, influencing the quality of the dyadic relationships; and, conversely, the extent to which the supervisor enjoys a high quality relationship with an employee also impacts his/her regard for the employee; (ii) subordinate role performance helps determine the quality of dyadic relationships because of the supervisor's performance goals; but supervisory support, as expressed in resource allocation, encouragement, job assignments, etc., which reflect the quality of relationship, also impacts level of performance, (iii)

affective regard influences PA ratings—which is the primary assumption of the studies reviewed; and, as consistency theory suggests, individuals will be liked by their superiors in relation to how well they are evaluated by them.

Developmental processes

Although developmental processes are difficult to study in organizations, it is not without precedent (cf. Hulin, 1990, on organizational adaptation). Over time interpersonal relationships involve greater breadth as more areas of personality are made accessible to one another, and eventually 'greater depths of social penetration' also take place, involving more fundamental personality characteristics that are ordinarily less accessible (Altman, 1974; Berg, 1984). Therefore, supervisor-subordinate relationships can be expected to change over time with respect to the variables that are salient; and the interpersonal processes represented in Fig. 1 characterize relatively long-term and stable relationships. Confirmation of the model is, therefore, to be expected only in samples characterized by such mature relationships. By 'mature' is meant relationships in which the supervisor has gained substantial familiarity with the employee's performance—both role-related and extra-role, the quality of their relationship has been established, personal knowledge of each other has been achieved, some relatively enduring levels of affective regard for each other have become characteristic of the relationship, and so forth.

Prior to that time, i.e. early in the process of developing a relationship, some of the proposed constructs and hypothesized paths are not pertinent. For example, with regard to similarity between members of the dyad, some attributes like biosocial identity may be recognized and processed immediately. Intra-psychic characteristics such as personal values and attitudes may not become known for some time, so are less likely to be among the early bases of judgments of perceived similarity (Harrison, Price, & Bell, 1998). Although congruence in attitudes is a relatively salient factor among acquaintances, to predict more long-term relationships similarity in personality is more important (Duck, 1973; Kelly, 1979). Similarly, Lefkowitz and Battista (1995) found that it took more than 1 month for aptitude test scores (presumably mediated by observed job performance) to be correlated with supervisors' liking for subordinates, whereas they had not been correlated early in the relationship.

Moreover, in the initial stages of the relationship extraneous input may be processed and become part of the early (biased) evaluation of the employee. For example, degree to which the supervisor participated in the hiring decision for an employee predicted positive or negative biases in subsequent PAs as a function of whether s/he had agreed or disagreed with the decision (Schoorman, 1988). Similarly, initial performance expectations can influence the quality of supervision afforded trainees, thus impacting their performance and ratings by means of a self-fulfilling prophecy (Eden & Shani, 1982), although those expectation effects may disappear in the face of actual performance data (Hanges, Holke, & Cox, 1992; Lefkowitz & Battista, 1995). Supervisors also may respond negatively to disconfirmation of their performance expectations for subordinates by punishing them with poorer ratings than warranted (Hogan, 1987).

Conclusions and recommendations

The studies reviewed in this paper have adequately demonstrated that supervisor liking may impact PA ratings. The proposed core model suggests, however, that understanding the relationship between the two variables may be more complicated than is generally supposed, especially with regard to a consideration of rater bias. The review also suggests that the reasons for our limited understanding of the role of supervisor affect include several conceptual and methodological problems with the research and, with a few exceptions, failure to appreciate the developmental nature of dyadic processes, or the 'multiple social and situational facets' (Judge & Ferris, 1993) that affect PA ratings. Potential developmental research procedures include: choosing variables as a function of length of 'relationship tenure' of the sample; including relationship tenure explicitly as an independent variable or moderator variable; or using it as a categorization variable so that data analyses are performed on cohorts of supervisor–subordinate pairs that are relatively homogeneous in tenure. The most ambitious possibility involves collecting data longitudinally, according to the temporal sequence of variables that makes sense developmentally.

A limitation of the studies reviewed is that they—including the field research—lack psychological fidelity to organizational PAs. The ratings made by research participants generally were of no consequence for the ratees nor themselves. While this may be acceptable for experimental studies designed to investigate intra-psychic rating processes, it seems less justifiable for field investigations whose strength is their putative external validity. Research needs to be performed on evaluations made by actual supervisors for purposes of fulfilling their real-life consequential responsibilities to appraise and supervise their subordinates.

The proposed model suggests that the association of supervisor liking with appraisal ratings does not necessarily represent bias. On the other hand, the glib acceptance of an absence of bias ('supervisors simply like good performers') is also not warranted in the absence of confirmatory analyses. Many human resources practices use supervisor PA ratings for making serious decisions concerning people's employment status, with little regard for the potential biases discussed in this paper.² For example, performance ratings are used frequently in criterion-related test validation: that process, and the regression model of predictive test bias in particular, implicitly assume use of relevant and unbiased criteria (Oppler, Campbell, Pulakos, & Borman, 1992). Nevertheless, personnel psychologists involved in test validation have given little consideration to the many potential sources of bias in supervisory ratings that have been studied and noted here, including the role of liking and of contextual influences. In some instances these effects represent criterion contamination. And if the ratings criterion is contaminated by social judgments (e.g. liking) that prove to be race, sex, and/or age-related (perhaps mediated by demographic similarity) the analysis of test bias may be specious and the 'adverse impact' on the affected group(s) unfair.

²This review has not considered the topic of 'upward appraisals' made by subordinates of their supervisors' performance, as used in the popular '360° feedback' procedure. At least one study has found that subordinates were more likely to manifest ratings biases than were their supervisors (Lefkowitz *et al.*, 1998).

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