



What happens after the developmental assessment center?

Employees' reactions to unfavorable performance feedback

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Abstract

Purpose – Departing from Hobfoll's conservation of resources theory, the paper aims to examine the relationship between resource losses (excessive job demands and unfavorable performance feedback) on the one hand, and negative job attitudes (dissatisfaction, reduced commitment, intention to leave) and burnout (exhaustion, cynicism, and reduced personal accomplishment) on the other hand.

Design/methodology/approach – The sample included surveys from 272 male constabulary officers who had participated in a developmental assessment center. Data were analyzed using hierarchical regression.

Findings – The results showed direct associations between resource losses and negative outcomes. There were indications for the development of loss spirals for four out of six negative outcomes. Specifically, these relationships between job demands and negative outcomes were stronger for those officers receiving unfavorable feedback than for officers not receiving unfavorable feedback.

Practical implications – Employees confronted with excessive job demands and unfavorable developmental assessment center (DAC) feedback were most vulnerable to combined resource losses, and this experience was associated with negative outcomes (i.e. more dissatisfaction, less affective commitment, more emotional exhaustion, and more cynicism).

Originality/value – The unique contribution of this study is that, besides balancing the benefits of using DACs with the costs of implementation, it is emphasized that it is important to anticipate consequences of unfavorable feedback. Moreover, the disappointment and association with negative outcomes should be explicitly considered in the design of the DAC.

Keywords Assessment centres, Feedback, Employee behaviour, Conservation, Resources

Paper type Research paper

Generally, performance feedback has been shown to be beneficial to both organizations and individuals by improving individual performance (Elkins and Phillips, 2000;



Gilliland, 1994; Jelley and Goffin, 2001; Lam *et al.*, 2002). Moreover, performance feedback can play a significant role in the development of employees' attitudes and behaviors (Lam *et al.*, 2002). However, the favorableness of the feedback – whether it is perceived as positive or negative – can be expected to be critical to how recipients exactly will react to it (Kluger and DeNisi, 1996). Employees receiving favorable feedback are expected to be more motivated to achieve their career goals (Lowry, 1994). However, how employees react to unfavorable performance feedback, and the consequences of such feedback (implying that valued career goals will be beyond one's reach) is less well understood (Jones and Whitmore, 1995).

Classic assessment centers (ACs) consist of a variety of individual- and group-oriented situational exercises in which the performance of employees is observed and rated by assessors, who are usually managers within the organization (Dreher and Dougherty, 1997). The favorable results of ACs as an effective personnel selection tool has been studied extensively (Harris *et al.*, 1993; Jansen and Stoop, 2001; Lievens, 2001). ACs are also increasingly used to identifying high potentials in organizational context (Goodge, 1998; Pepermans *et al.*, 2003). Performance feedback plays a more prominent role in so-called developmental assessment centers (DACs). With the introduction of DACs, ACs serve a variety of learning and education functions, such as the assessment of employee promotion potential, and requirements for personal training and development, see for instance Pynes and Bernardin (1992) and Ryan *et al.* (2000).

DACs concentrate on the provision of detailed performance feedback to employees concerning their strengths and weaknesses (Dreher and Dougherty, 1997; Lee, 2002; Lievens, 2002). Two distinctive characteristics of DACs when compared to classical ACs attract attention. First, classic ACs select people “at the gate” and since low performers will not be hired; negative assessments will be less noticeable for the organization, than the negative assessments of participants in DACs might be. That is, after participation in a DAC, not only the selected (promising) employees receive feedback, but also employees that have performed less well and this latter group of employees receiving unfavorable performance feedback will stay in their job. Second, usually all candidates in classic ACs are assessed, whereas employees for DACs are specifically invited to participate. This may heighten DACs participants' feelings of being valued and being promotable when invited, but in case feedback turns out to be unfavorable, this may also easily be much greater disappointment.

In the present study, we will focus on employees' reactions to unfavorable performance feedback – after participation in an DAC – from the perspective of conservation of resources (COR) theory (Hobfoll, 1989; Hobfoll and Shirom, 1993). Within COR theory, the confrontation with negative performance feedback can be conceptualized as failure to retain resources following investments. According to COR theory, subsequent resource losses may be viewed as a downwards chain of events, leading to so-called loss spirals. Loss spirals are expected to result in negative outcomes. In the present study, these negative outcomes are job attitudes (dissatisfaction, reduced affective commitment, and intention to leave) and job burnout (emotional exhaustion, cynicism, and reduced professional efficacy). Hypotheses will be tested using the information of a survey among Royal Dutch Constabulary officers. The Royal Dutch Constabulary is an organization that has grown rapidly in the last five years, mainly caused by a new strategy and extension of

job assignments, and therefore assessing promotability within the Royal Dutch Constabulary has gained in importance, which resulted in the use of DACs.

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COR theory and unfavorable performance feedback

According to Hobfoll's (1989) COR theory, employees have a basic motivation to obtain, retain, and protect that which they value, i.e. their resources. Strain occurs when employees are threatened with resource loss or fail to retain resources following investments (Hobfoll and Shirom, 1993). COR theory has been successfully employed in predicting stress outcomes, ranging from the consequence of traumatic stress to experiencing everyday stressors (Hobfoll, 2001, 2002). Moreover, the loss of resources concept has received support in various contexts, including organizational settings and health contexts. For instance, Hobfoll *et al.* (2003) found that resource loss (loss of social support among inner city women) was associated with depressive mood and anger. Grandey and Cropanzano (1999) found that chronic work and family stressors drained resources over time and for their sample of university professors this meant more job and life dissatisfaction. Experiencing these negative states was related to a desire to minimize this loss of resources, in this case by intention to leave. As a final example, the study of Monnier *et al.* (2002) indicated that fire-emergency workers' loss of resources was directly related to depressive symptoms and anger.

In this study, we conceptualized unfavorable DAC feedback as resource loss. To date, some studies indeed support this idea. For instance, the study of Jansen and Stoop (2001) examined the relationship between outcomes of an assessment center and turnover. They found a higher tendency to leave among persons with lower ratings in the AC exercise. Furthermore, the study of Engelbrecht and Fischer (1995) showed that participation in a DAC affected behaviors, e.g. task structuring and empathy, and that these behaviors were positively related to the favorableness of the DAC feedback. In their ten-year follow-up evaluation of a management AC in a large insurance company, Jones and Whitmore (1995) showed that DAC feedback and recommendations tended to be followed only if the feedback sent a positive message about future advancement.

In the present study, we will examine the association of these resource losses with negative attitudes, i.e. dissatisfaction, reduced affective commitment, and increased intention to leave. Moreover, since employees may also react with burnout to such stressful events, we will also examine the relationship between resource losses and burnout (Hobfoll and Shirom, 1993). Burnout is a work-related stress reaction that can be found among employees in a wide range of occupations, including constabulary officers (Bakker *et al.*, 2002; Schaufeli and Enzmann, 1998). Most contemporary researchers agree that the syndrome is characterized by three related, but empirically distinct elements, namely exhaustion, cynicism, and reduced professional efficacy (Leiter and Schaufeli, 1996; Maslach and Jackson, 1984; Maslach *et al.*, 1996). Feelings of exhaustion, or energy depletion, are generally considered a core symptom of the burnout syndrome (e.g., Shirom, 1989). Cynicism refers to the development of negative, cynical attitudes toward work and the people with whom one works (e.g., clients and colleagues). The third dimension of burnout, reduced professional efficacy refers to the belief that one is no longer effective in fulfilling one's job responsibilities. Thus, burned-out individuals suffer from feelings of chronic exhaustion, behave indifferent toward their work and clients, and they believe that their performance has suffered accordingly.

In the remainder of this section, we will specify two simple direct relationships: resource loss through negative performance feedback; and resource loss through excessive job demands. After that we will specifically elaborate on the differences between employees that did not receive unfavorable feedback versus employees that received unfavorable performance feedback, by using the loss spiral concept to specify moderating relationships.

(1) Resource loss through negative performance feedback

In the present study, we conceptualized the confrontation with unfavorable performance feedback as the failure to retain resources following employees' job investments. COR theory (Hobfoll, 1989, 2002) provides the theoretical background. According to COR theory, one way that recipients of negative performance feedback can limit resource loss is by adjusting their attitudes and behaviors (Lam *et al.*, 2002). For instance, when performance feedback violates one's confidence of being a valuable member of the organization, this can be quite stressful. The negative implications of decreased confidence in one's opportunities for career development then may signify sizeable disappointment to most employees, and this resource loss is expected to be associated with negative outcomes (Lam *et al.*, 2002). In sum, we formulated the following hypothesis:

- H1. There is a positive association between unfavorable performance feedback and negative job attitudes and burnout.

(2) Resource loss through excessive job demands

Generally, failure to retain resources after employees' investments may not only result from specific experiences, i.e. unfavorable performance feedback, but can also result from more common occupational stressors, i.e. aspects of the work environment that cause strain. Stressors that caught particularly attention are excessive job demands, e.g. in the demand-control model of Karasek(1979). Research findings support the general notion that negative outcomes, such as negative attitudes and burnout, are a response to loss of resources by overload. Strains associated with workload have been found to be uniformly negative across behavioral, psychological outcomes. Moreover, workload is strongly and consistently related to burnout, particularly the exhaustion dimension (Harvey *et al.*, 2003). The study of Bliese and Castro (2000) among 1,786 soldiers also showed a clear relationship between demands and negative outcomes. Consequently, it is expected that the experience of excessive job demands also triggers negative outcomes (Demerouti *et al.*, 2004; Hobfoll and Shirom, 1993; Taris *et al.*, 2001):

- H2. There is a positive association between excessive job demands and negative job attitudes and burnout.

(3) Loss spiral

Finally, experiencing strain by unfavorable performance feedback and excessive job demands can be conceptualized as an unfolding process that entails a chain of negative events, i.e. the development of loss spirals (Hobfoll and Shirom, 1993). That is the availability of resources is diminished through a chain of negative events, thus creating both increased strain and diminished resistance capacity (Ennis *et al.*, 2000; Norris and Kaniasty, 1996). With the concept of loss spirals, COR theory provides a

framework for understanding how unfavorable performance feedback can be expected to affect especially those employees who are already under pressure. For instance, when employees are confronted with resource losses – unfavorable performance feedback – this can be expected to be ego threatening, especially for employees that were specifically invited to participate, and these employees may realize that their career will not be as successful as they perhaps had hoped for. For such disappointed employees it will be even harder to cope with excessive job demands. Thus, further threats of losses are encountered whereas there was already a weakened resource pool. These stressful events and their consequences may then cycle into forceful loss spirals (Hobfoll and Shirom, 1993).

Most studies on loss spirals examined the effects of resource loss under extreme conditions. For instance, the development of loss spirals in the aftermath of a disaster where resource losses were associated with both psychological distress and physical symptoms at six months post-flood follow-up (Smith and Freedy, 2000). Norris *et al.* (1999) studied incidence and duration of the psychological consequences of Hurricane Andrew and negative outcomes were largely explained by changes over time in resource levels. In the work context, also indications for this phenomenon have been found by the development of loss spirals to follow from initial loss of resources, with each loss resulting in depletion of resources (Demerouti *et al.*, 2004). Applied to the present study, this loss spiral is expected to look as follows: Unfavorable performance feedback will have a greater impact on negative job attitudes than will not unfavorable performance feedback for employees already under pressure from excessive job demands:

- H3.* The positive association between job demands on the one hand and negative job attitudes and burnout on the other hand will be moderated by negative DAC feedback. This relationship will be stronger for employees who received negative DAC feedback than for employees who were not unfavorably evaluated.

Method

This study was part of a written survey on working conditions and occupational health among all employees of the Royal Dutch Constabulary Officers (response rate 61 percent). Questionnaires were sent to the private addresses of all constabulary officers, with free return envelopes. Anonymity was guaranteed, and an information campaign supported the study. From this research population, we selected those respondents that indicated they were invited to attend and actually had attended a DAC within the Constabulary: 272 respondents (all men). From these 272 respondents 80 percent were classified as not having received unfavorable DAC feedback and 20 percent as having received unfavorable DAC feedback. The high percentage of DAC participants that did not receive unfavorable DAC feedback will be a reflection of the personal invitation to participate to only those candidates with good performance records.

Measurement

Independent variables. Following Kluger and DeNisi (1996), performance feedback was measured by asking if the feedback after the AC was positive or negative. Responses were classified as (1) unfavorable for those respondents that agreed to be disappointed or very disappointed, and (0) not unfavorable when the respondents did not receive

unfavorable feedback i.e. did not agree to be disappointed with the assessment feedback. The measurement of excessive job demands of the respondent was assessed with three items (see Bakker *et al.* 2003). An example is “I have to work above the level of my competencies”. Alpha was 0.68. Excessive job demands was measured with a five-point response format (1 = never, 5 = always). The scores on excessive job demands were centered on their means prior to the analyses (see Aiken and West, 1991).

Dependent variables. Three negative job attitudes were examined. Job dissatisfaction was measured with three items. An example is “I am very satisfied with my job”. Items were measured with a five-point response format, ranging from 1 = completely agree to 5 = completely disagree. Alpha was 0.87. Affective commitment was measured with six items (Mowday *et al.*, 1979). An example is “I tell my friends and family that my organization is a pleasant organization to work for” (1 = completely agree, 5 = completely disagree). Cronbach’s alpha of this scale was 0.83. Intention to leave was measured with four items. An example is “I am planning to leave this organization within the next year” (1 = completely disagree, 5 = completely agree). Alpha was 0.86.

Burnout was assessed using the Maslach Burnout Inventory – General Survey (Schaufeli *et al.*, 1996). The instrument consists of three sub-scales, tapping exhaustion, cynicism, and professional efficacy. Exhaustion was measured with five items, e.g. “I feel tired when I get up in the morning and have to face another day on the job” (Cronbach’s alpha = 0.89). Cynicism reflects indifference or a distant attitude towards work, and was measured with five items, such as “I have become more cynical about whether my work contributes anything” (Cronbach’s alpha = 0.77). Finally, reduced professional efficacy encompasses both social and non-social accomplishments at work, and was assessed with six items. An example is “I feel I am (not) making an effective contribution to what this organization does” (Cronbach’s alpha = 0.79). Participants were asked to indicate the extent to which they agreed with each statement using a seven-point rating scale, ranging from 0 = never to 6 = every day).

Control variables. Age (in years) and educational level (in years of education completed) were included as control variables in the analyses. Additionally, since having overall negative Career development opportunities can be viewed as one of the reasons to develop negative attitudes or burnout, this variable was also controlled. This concept was inventoried with three items. An example is “My work offers enough opportunities to learn new things”. Items are scored on a five-point scale, ranging from 1 = never to 5 = always. Alpha was 0.77.

Average scale scores were calculated for all measures. Further, the possibility of common method variance was addressed with Harman’s one factor test. The underlying assumption of this technique is that if a substantial amount of common method variance exists in the data, either a single factor will emerge or one general factor will account for the majority of the variance among the variables (Podsakoff and Organ, 1986). We entered all the items of the seven scales of the dependent and independent variables that were used into an exploratory factor analysis. This factor analysis yielded seven factors accounting for 63 percent of the variance, and factor 1 accounted for 28 percent of the variance. Since a single factor did not emerge and one general factor did not account for most of the variance, common method variance is unlikely to be a serious problem in the data.

Results

Descriptive statistics

Table I presents means, standard deviations, and correlation coefficients for all variables included in the study. As can be seen from this table, the correlations between the dependent variables (attitudinal measures and the burnout scales) are low to moderately high. Furthermore, excessive job demands are significantly related to all six dependent variables and unfavorable feedback is only related to cynicism ($r = 0.16, p < 0.01$) and dissatisfaction ($r = 0.14, p < 0.05$).

Unfavorable performance feedback and negative outcomes

According to *H1* and *H2*, we expected direct associations between employees' lack of resources and negative outcomes. *H3* qualified these main effects by stating that particularly the combination of negative DAC feedback and high job demands would be associated with negative job attitudes and burnout. To test these hypotheses, we conducted a series of hierarchical regression analyses.

The results of these regression analyses (see Tables II and III) showed only one direct relationship out of six, as specified in this *H1*, namely for the relationship between unfavorable DAC feedback and the burnout dimension of cynicism ($\beta = 0.13, p < 0.05$). Thereby, *H1* was not supported.

H2 specified a positive relationship between excessive work demands and negative outcomes. There was a positive association between excessive job demands and the three burnout dimensions: With emotional exhaustion ($\beta = 0.34, p < 0.01$), with cynicism ($\beta = 0.18, p < 0.01$), and with reduced professional efficacy ($\beta = 0.24, p < 0.01$). The results did not show relationships between excessive job demands and negative job attitudes. Thereby, the results lent partial support for *H2*.

H3 predicted an interaction, and this hypothesis was supported for four out of six outcome variables. As can be seen in Table II, the interaction coefficients of excessive job demands \times unfavorable performance feedback are significant for dissatisfaction ($\beta = 0.13, p < 0.05$), reduced affective commitment ($\beta = 0.13, p < 0.05$), emotional exhaustion ($\beta = 0.15, p < 0.05$), and cynicism ($\beta = 0.16, p < 0.05$). We examined whether these interactions supported the hypothesized directions by computing the partial correlations for both the not unfavorable feedback and the unfavorable feedback group between job demands and these outcome variables, controlling for age, education, and career development perspectives. These partial correlations showed that for the group receiving unfavorable feedback the association between job demands and dissatisfaction was $r = 0.44$ ($p < 0.01$), for reduced affective commitment was $r = 0.41$ ($p < 0.01$), for emotional exhaustion was $r = 0.63$ ($p < 0.01$), and for cynicism $r = 0.56$ ($p < 0.01$). Whereas the partial correlations for the group that did not receive unfavorable feedback the association between job demands and dissatisfaction was $r = 0.09$ (ns), for reduced affective commitment $r = 0.03$ (ns), for emotional exhaustion $r = 0.33$ ($p < 0.01$), and for cynicism $r = 0.20$ ($p < 0.01$). That is, for all four interactions, the relationship between job demands and negative outcomes was stronger for those who received unfavorable performance feedback than for those employees that were not confronted with unfavorable performance feedback. Thereby, *H3* was largely supported.

Table I.
Descriptives and
correlations ($n = 272$)

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Age	42.95	4.54										
2 Education	9.42	1.36	-0.20**									
3 Career devel. perspect.	3.48	0.77	0.05	-0.04								
4 Excessive job demands	1.89	0.66	0.08	-0.05	-0.31**							
5 Unfavorable feedback	0.20	0.40	0.11	0.03	-0.08	0.03						
6 Exhaustion	1.69	1.12	0.05	-0.05	-0.22**	0.44**	0.07					
7 Cynicism	1.53	1.05	-0.10	0.03	-0.40**	0.35**	0.16**	0.45**				
8 Reduced personal acc.	4.36	0.85	-0.06	0.05	-0.28**	0.35**	0.08	0.34**	0.46**			
9 Dissatisfaction	2.26	0.81	0.01	0.05	-0.51**	0.29**	0.14*	0.35**	0.56**	0.48**		
10 Reduced commitment	3.21	0.71	-0.23**	0.10	-0.35**	0.17**	-0.07	0.15*	0.44**	0.35**	0.44**	
11 Intention to leave	2.55	0.94	-0.35**	0.12	-0.43**	0.19**	-0.05	0.24**	0.46**	0.27**	0.46**	0.54**

Notes: * $p < 0.05$; ** $p < 0.01$

	Dissatisfaction		Reduced commitment		Intention to leave	
	<i>b</i>	Beta	<i>b</i>	Beta	<i>B</i>	Beta
<i>Step 1</i>						
Age	0.00	0.01	-0.03	-0.21**	-0.07	-0.32**
Education	0.03	0.04	0.03	0.05	0.03	0.04
Career development perspectives	-0.50	-0.45**	-0.30	-0.32**	-0.49	-0.38**
Excessive job demands (<i>E</i>)	0.12	0.10	0.04	0.04	0.11	0.07
Unfavorable DAC feedback (<i>U</i>)	0.19	0.09	-0.13	-0.07	-0.14	-0.06
<i>Step 2</i>						
<i>E*U</i>	0.33	0.13*	0.29	0.13*	0.18	0.06
<i>R</i> ² Step 1		0.29**		0.19**		0.30**
ΔR^2 Step 2		0.01*		0.01*		0.00

Notes: * $p < 0.05$; ** $p < 0.01$

Table II. Regression analyses for negative job attitudes

	Exhaustion		Cynicism		Reduced pers. acc.	
	<i>b</i>	Beta	<i>b</i>	Beta	<i>B</i>	Beta
<i>Step 1</i>						
Age	0.00	0.01	-0.03	-0.12*	-0.01	-0.07
Education	-0.03	-0.04	0.00	0.01	0.03	0.04
Career development perspectives	-0.16	-0.10	-0.44	-0.31**	-0.20	-0.18**
Excessive job demands (<i>E</i>)	0.58	0.34**	0.29	0.18**	0.29	0.24**
Unfavorable DAC feedback (<i>U</i>)	0.14	0.05	0.35	0.13*	0.11	0.05
<i>E*U</i>	0.51	0.15*	0.52	0.16*	0.29	0.12
<i>R</i> ² Step 1		0.21**		0.24**		0.16**
ΔR^2 Step 2		0.02*		0.02*		0.01

Notes: * $p < 0.05$; ** $p < 0.01$

Table III. Regression analyses for burnout dimensions

Discussion

What happens after participation in a DAC with those employees who received unfavorable feedback? It was shown that there were some direct associations between resource losses (i.e. excessive job demands and unfavorable DAC feedback) and negative outcomes. Moreover, there were indications for the development of loss spirals by recipients of negative performance feedback for four out of six negative outcomes. That is, the relationship between job demands and negative outcomes was stronger for those who were confronted with unfavorable feedback than for those that were not confronted with unfavorable feedback.

Generally, unfavorable performance feedback can be expected to be a disconfirmation of most employees' long-held beliefs, since most employees tend to overestimate their own level of performance (Lam *et al.*, 2002). Such unmet expectations tend to evoke negative attitudes and behaviors. Especially for this group of constabulary officers, the expectations may have been high since they were all personally invited to participate in the DAC. We found for this specific group that the moderating effects of the unfavorable performance feedback on the relationship job demands and negative outcomes were eminent. This may signal that when resource

losses add up, negative outcomes are more likely. This points at the possible development of loss cycles with increasing magnitude and more profound effects on employees' attitudes and behaviors (Hobfoll, 2002).

Except for the direct relationship between unfavorable performance feedback and cynicism, no direct relationships between feedback and the other outcome variables were found. It is possible, that the existence of this relationship emphasizes that in some cases employees perceive the performance feedback as so-called "dead-end feedback": feedback that results in no noticeable change. This type of feedback breeds cynicism (Antonioni, 1996). Alternatively, it is also possible that employees evaluate feedback also for its perceived "harm-benefit" potential for the self (Audiaa and Locke, 2003). Believing that one is pursuing the wrong strategy to obtain a certain goal may reinforce the development of negative, cynical attitudes toward work and the people with whom one works. These symptoms are typical for the cynicism dimension of burnout (Bakker *et al.*, 2002).

Next to this study, it will be interesting to know if resource losses by negative performance feedback actually lead to impaired job performance, especially since this is a group of employees that was specifically asked to participate in a DAC although the present study only examined the relationship between resource losses and negative attitudes and burnout, the literature offers indirect indications for the existence of resource losses with associated negative behaviors. For instance, burnout has been associated with various negative behaviors, such as absenteeism, intention to leave the job, and actual personnel turnover. For people who stay on the job, burnout has been shown to lead to lower productivity and effectiveness at work (Maslach *et al.*, 2001). Further, meta-analyses indicate associations of job performance with affective commitment (Meyer *et al.*, 2002) and with job satisfaction (Petty *et al.*, 1984). Because of the importance of the observing such relationships, future research should examine whether a direct relationship exists between resource losses and loss spirals on the one hand and lower job performance and/or negative behaviors on the other hand, within a longitudinal design.

Limitations

The use of self-report measures raises the issue of common method variance, and this was addressed with Harman's one factor test. The findings showed that it was unlikely to be a serious problem in the data. Nevertheless, multi-method studies may add confidence to our conclusions regarding the development of loss spirals. Further, in the present study, we examined how resource losses were associated with negative outcomes. Because of the cross-sectional nature of the data, we could not test multiple resource loss sequences. The development of loss spirals might be best tested within a longitudinal design to be able to carefully disentangle the exact nature and consequence of loss spirals.

Implications

The results of the present study have a number of practical implications for organizations seeking to reduce the negative consequences of resource loss and to prevent the development of loss spirals. DACs are used to predict which employees are qualified and who are not qualified candidates for a promotion or developmental trajectory. DACs provide the participants explicitly with feedback of their strengths

and weaknesses. Previous studies on these types of assessment centers predominantly focused on the predictive qualities of these instruments for those employees who were favorably evaluated. Any improvement in validity of DACs in these studies was seen in the light of the reduction of the probability of rejecting qualified applicants and of accepting unqualified candidates. However, in the present study we argued that unfavorable DAC feedback might have negative consequences for those going through DACs. Indications of loss spirals were found. Employees confronted with excessive job demands and unfavorable DAC feedback were most vulnerable to this combined resource losses, and this experience was associated with negative outcomes (i.e. more dissatisfaction, less affective commitment, more emotional exhaustion, and more cynicism).

In the current study, the DAC was indeed used for promotional and developmental decisions; therefore, the negative feedback had direct implications for employees' career. This does not only hold for this particular organization, it seems to be already almost routine in many organizations, in which the high potentials are further selected by DACs and where the potentials are offered good career opportunities and access to resources in terms of mentoring, training, and increased income. Some of the might-be promising employees, however, will not be classified as a high potential, and received fewer resources. We argue that this can also be the start of a typical example of a self-fulfilling prophecy. Management can make the following causal attribution that the negative attitudes and burnout are the reason why a person received negative feedback. Our study does not solve the issue of causality. However, it was shown that the combination of disappointment over negative feedback with excessive demands results in negative outcomes. These negative outcomes may trigger the judgment of their superiors negatively. We recommend paying attention to the match of the expectations of the employee and the assessors. This is not an indication per se of competencies of the employee, but has also to do with the execution of the DAC, the communication on goals, criteria, procedures, and possible outcomes for the participants. Moreover, the disappointment and association with negative outcomes should be explicitly considered in the design of the DAC, for instance, by the use of a follow-up meeting for those receiving negative performance feedback. The key question for management, both HRM and line management, is nevertheless, that possible negative by-effects of DACs should be considered, before using the instrument, and in determining the specific functions of DACs within learning and educational trajectories. An alternative is to let the employees share their feedback with management and ask for suggestions. Although sharing feedback and asking for suggestions may only be of limited importance (Smither *et al.*, 2004). However, it may be realistic to admit that organizational practices of excessive job demands are unavoidable. As Bahr and Bahr (2001) clarify, it is probably the nature of organizations to demand more than employees can give. The results of the present study showed that there are limitations for employees and organizations. Accordingly, when loss of resources is unavoidable, it becomes critical to interrupt the development of loss spirals, for instance by introducing relaxation periods, thereby not to overwhelm employees with negative experiences (Harris *et al.*, 1993; Westman and Eden, 1997). Further, confronted with negative consequences of performance feedback, it becomes even more critical that the dimensions measured in the DAC are really reliable and valid indicators of competences and abilities (Lievens, 2002). Finally, ACs are

expensive tools, and in addition to the costs of development, they require excessive training of the assessors and intensive support from the HR department (Dayan *et al.*, 2002). However, it is not only important to balance the benefits of using DACs with the costs of implementation, but also to anticipate potential negative outcomes and to be even more cautious in implementing these specific assessment center procedures.

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