

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Zyberaj, Jetmir

Article — Published Version

The effects of supervisory negative feedback and coaching on employees' responses to feedback: The moderating role of mindset

**Human Resource Development Quarterly** 

# **Provided in Cooperation with:**

John Wiley & Sons

Suggested Citation: Zyberaj, Jetmir (2024): The effects of supervisory negative feedback and coaching on employees' responses to feedback: The moderating role of mindset, Human Resource Development Quarterly, ISSN 1532-1096, Wiley Periodicals, Inc., Hoboken, NJ, Vol. 36, Iss. 3, pp. 243-262,

https://doi.org/10.1002/hrdq.21553

This Version is available at: https://hdl.handle.net/10419/330160

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

# Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# EMPIRICAL RESEARCH QUANTITATIVE

# The effects of supervisory negative feedback and coaching on employees' responses to feedback: The moderating role of mindset

# Jetmir Zyberaj 👨

Work and Organizational Psychology Group, Department of Psychology, University of Bamberg, Bamberg, Germany

#### Correspondence

Jetmir Zyberaj, Work and Organizational Psychology Group, University of Bamberg, Markusplatz 3, 96047 Bamberg, Germany. Email: jetmir.zyberaj@uni-bamberg.de

#### **Abstract**

Feedback is a vital human resource development (HRD) practice, extensively researched and used to regulate employee behavior and performance. However, despite a century of research and immense significance and use, we still do not fully know why some accept feedback while others reject it. Critics blame both providers and recipients, as well as feedback message format, for this failure. In this study, I investigated whether the focus of the supervisory feedback (negative vs. negative and facilitative) could enhance employees' responses to feedback (e.g., acceptance and use). I also examined whether employees' mindset (i.e., fixed vs. growth) would moderate these relationships. I proposed that employee coaching (i. e., negative and facilitative) would be more accepted than negative feedback alone. In addition, I expected a positive moderating role of the growth mindset between supervisory feedback and employees' responses. To test these assumptions, I conducted a laboratory experimental vignette study (N = 69). In line with propositions, employee coaching had a larger effect on the employees' responses to feedback (e.g., feedback acceptance; M = 4.95, SD = 1.24) than negative feedback alone (M = 4.08, SD = 1.35). In addition, simple slope results showed that employee coaching was significantly higher than negative feedback for growth mindset (i.e., +1 SD). Finally,

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Author(s). Human Resource Development Quarterly published by Wiley Periodicals LLC.

path analysis revealed that the interaction between negative feedback, employee coaching, and mindset yielded the strongest positive effect on employees' responses to feedback. Overall, findings add to and endorse calls for more futurefocused HRD practices during feedback interventions. In addition, for effective feedback, this study calls for HRD practitioners to account for all critical factors involved in feedback exchanges, from provider to recipient and feedback message.

#### **KEYWORDS**

employee coaching, employee mindset, employee responses to feedback, supervisory feedback

#### 1 INTRODUCTION

Performance feedback is an essential human resource development (HRD) intervention that organizations utilize for both developmental and administrative purposes (London, 2003). While positive feedback is generally well-received, negative feedback often incites fear and increases negative reactions among employees (Kluger & DeNisi, 1996; London & Smither, 2002). In addition, performance feedback, even positive, can sometimes hurt employee performance (Kluger & DeNisi, 1996). Critics frequently attribute these feedback failures to the sources, typically employees' superiors such as supervisors (Adler et al., 2016). To address these failures, feedback researchers suggest adopting more future-oriented leadership approaches to mitigate negative reactions and enhance the effectiveness of feedback interventions (Gnepp et al., 2020; Rasheed et al., 2015). For example, the use of feedback coaches has been advocated as a superior method during HRD interventions, providing guidance and facilitation during feedback sessions (Hsieh & Huang, 2018; Murphy, 2020; Nieminen et al., 2013).

This study contributes to this line of research by reconciling past findings on the impact of leadership approaches on employee responses to performance feedback. I proposed that three factors can mitigate feedback failures during HRD interventions. First, performance feedback can differ in its effects by focusing on the future (Gnepp et al., 2020; London et al., 2023a; Wang et al., 2016). I test this proposition by employing supervisory feedback as the most common form of feedback source (DeNisi & Murphy, 2017). I define supervisory feedback as the information provided to employees about their performance by their superior, such as a supervisor (Ilgen et al., 1979; Kinicki et al., 2004). Noteworthy, in this study, I only account the effects of the information (i.e., feedback sign) provided by the supervisor and not the possible effects of the source characteristics (for a review on source characteristics, see Lechermeier & Fassnacht, 2018). To test the impact of the focus of supervisory feedback, I employ negative feedback and employee coaching. Negative feedback is a deficiency in one's job performance and is usually provided by evaluating recipients' past performance to raise their awareness about the performance gap. Employee coaching is an extension of feedback. Coaching concerns providing feedback that aims to further guide and facilitate one's job performance by providing feedback in a way that keeps recipients focused on the task and guides them toward improvements. Noteworthy, because positive feedback features tend to overlap with several features of employee coaching (e.g., both take positive approaches into one's perfomance and elicit positive mood), I only utilize employee coaching to simplify research model and avoid redundancy. Despite differences, both feedback and coaching are crucial for HRD practices and add to the implications of leadership during performance management interventions. Second, I suggest that employee characteristics might explain some of the results of these relationships. Specifically, I propose that the type of mindset (Dweck, 2017; Dweck & Yeager, 2019) might provide further insights into employee reactions and how they view the utility of feedback. Dweck (2017) defined mindset as implicit beliefs about one's malleability of personal attributes, such as intelligence, composed of growth and fixed mindset. A growth mindset entails beliefs that attributes, such as intelligence, are malleable and can be improved through efforts. Fixed mindset beliefs disregard learning through efforts based on convictions that intelligence is fixed and unmalleable. Mindset is a vital HRD practice for individual and organizational outcomes (Han & Stieha, 2020; Keating & Heslin, 2015). By involving mindset, this study adds to feedback literature by elucidating how individual differences in beliefs about attribute malleability—specifically growth and fixed mindsets—shape feedback reception and utility (Dweck & Yeager, 2019). Highlighting the role of mindset aligns with emerging HRD practices prioritizing adaptability and learning (Han & Stieha, 2020; Keating & Heslin, 2015), offering a nuanced understanding of the psychological mechanisms underpinning varied feedback responses. This investigation provides a theoretical framework for interpreting mixed feedback outcomes and suggests practical feedback strategies to foster environments conducive to learning and growth. Consequently, integrating mindset theory into feedback research addresses a critical gap in our understanding of feedback dynamics and presents actionable insights for optimizing HRD outcomes. Third, following criticism about the employee reactions, I aimed to shed light on employees' responses to feedback (i.e., how recipients perceive and respond to feedback). To explain employee responses, I employed four facets based on Ilgen et al.'s (1979) feedback processing model: perceived accuracy, acceptance of feedback, desire to respond to feedback, and intended response. I suggest that these intermediate psychological processes might facilitate understanding employee reactions to supervisory feedback.

This study contributes in several ways to research on performance feedback. First, it empirically tests the assumptions that employee coaching, as a future-focused form of feedback, might help explain employee reactions toward supervisory feedback. Previous research has tested other forms of future-focused feedback, such as feedforward (Budworth et al., 2015). However, past research focused on job-related outcomes. Testing these assumptions regarding employee reactions might add insights into psychological mechanisms' role in feedback (Anseel & Lievens, 2009; Keeping & Levy, 2000; Kluger & DeNisi, 1996). In addition, researchers call for more future-focused approaches as better alternatives compared to sole evaluations (Gnepp et al., 2020; Murphy, 2020). For instance, Gnepp et al. (2020) noted that focusing on the future helps "people focus on features under their control... and leads people to take more responsibility, initiate actions, engage in effortful striving, and achieve more of their goals" (p. 4). Second, by investigating mindset, this study adds to the role of recipients' characteristics for supervisory feedback. Differences between individuals' beliefs in knowledge as fixed (fixed mindset) or malleable (growth mindset) might explain their reactions toward performance evaluations (Jordan & Audia, 2012). Together, supervisory feedback focus and employee mindset might explain why some accept feedback while others reject it. Employee responses, in turn, explain subsequent employee performance.

# 2 | HYPOTHESES DEVELOPMENT

Among feedback sources, the top-down (supervisor to subordinate) approach of feedback is most commonly used in organizations (DeNisi & Murphy, 2017). Typically, supervisory feedback provides specific information about subordinates' current performance, intending to increase their motivation and job performance (Eva et al., 2019). However, despite these positive intentions, supervisory feedback often fails to achieve these goals, especially when feedback is negative (Belschak & Den Hartog, 2009; Kluger & DeNisi, 1996).

## 2.1 | Employee responses to feedback

Employee reactions to feedback are shown to be good predictors of the subsequent employee performance (Anseel et al., 2011; Kinicki et al., 2004; Pichler, 2012; Pichler et al., 2020; Sheldon et al., 2014). Research has shown that for

employees to benefit from feedback, various employee reactions must be accounted, such as fairness, accuracy, or satisfaction with the feedback (Brett & Atwater, 2001; Pichler, 2012; Sparr & Sonnentag, 2008). Similarly, the way feedback is framed, formatted, or delivered has also implications on employees' reactions to feedback (Chun et al., 2018; J. Kim et al., 2024). This study investigates how different formats of supervisory feedback, namely negative feedback and employee coaching, influence employees' reactions to feedback.

Following the feedback processing model of Ilgen et al. (1979), this study explores four interdependent variables, which sum up employee reactions from both cognitive and motivational aspects. The first two reactions (perceived accuracy and acceptance of feedback) entail cognitive reactions, while the second chain (desire to respond and intended response) are motivational. A study by Kinicki et al. (2004) investigated perceived accuracy, as well as the desire to respond and intended response. However, Kinicki et al. (2004) neglected feedback acceptance, which I intend to add as another important initial cognitive response from employees. In addition, Kinicki et al. (2004) focused on source's characteristics as predictors (i.e., credibility), while I focus on current calls to test future-focused formats of feedback (i.e., employee coaching). Findings by Kinicki et al. (2004) showed that employees' reactions moderate the relationship between source's characteristics and some types of feedback they used and the subsequent performance. Adding to this research, the target of this study is to further advance the understanding of whether the newly recommended formats of feedback, known as future-focused formats (Gnepp et al., 2020), make a difference on employees' reactions to feedback, compared to more traditional performance feedback formats, such as negative feedback alone (Belschak & Den Hartog, 2009). In addition, different from Kinicki et al. (2004), this study follows the initial recommendation by the feedback intervention theory (FIT; Kluger & DeNisi, 1996) for research that focuses "on the processes induced by [feedback interventions] FIs and not on the general question of whether Fls improve performance" (p. 278). Thus, this study utilizes employee mindset as a moderating variable between supervisory feedback formats and the employee reactions (as an outcome).

# 2.2 | Supervisory negative feedback

Generally, people accept positive feedback more than negative (Anseel & Lievens, 2009; Goller & Späth, 2023). The self-enhancement theory (Shrauger, 1975) supports this claim, stating that individuals prefer and seek feedback that aligns with their positive self-views. On the contrary, negative feedback threatens one's ego concerns and self-image, evoking feelings of defensiveness (London & Smither, 2002), which might reduce employee willingness to respond to it positively (Anseel & Lievens, 2009). However, despite rejections, negative feedback is crucial for learning and growth.

Recent studies demonstrated that negative feedback hinders one's learning motivation due to its ego-threatening features, causing recipients to tune out (i.e., move away from the task at hand) and preventing their further information processing (Eskreis-Winkler & Fishbach, 2019) and hindering employee creativity (Y. J. Kim & Kim, 2020). Others have shown that negative feedback can also affect employee reactions. For instance, researchers reported a negative association between supervisory negative feedback and employee perceptions of feedback, such as accuracy (Brett & Atwater, 2001) and fairness (Sparr & Sonnentag, 2008). Because of the threats to one's ego and self-image and the tendencies of individuals for ego protection (London & Smither, 2002), I expect employees to react negatively to supervisory negative feedback, such as by rejecting it or expressing a low desire to respond to it:

**Hypothesis 1.** Supervisory negative feedback will negatively affect employee responses to feedback.

# 2.3 | Employee coaching

Recently, there has been evidence that feedback that focuses on solutions rather than mistakes mitigates the harmful effects of feedback (Keith et al., 2022). Such findings align with research noting the role of future-focused

approaches, such as future-focused feedback (Gnepp et al., 2020), strength-based performance appraisal (Bouskila-Yam & Kluger, 2011), feedforward interview (Kluger & Nir, 2010), or employee coaching (Heslin et al., 2006).

Following claims about feedback coaches (Murphy, 2020), I used employee coaching to test future-focused feedback for important reasons. First, coaching has a long history of usage in organizational psychology, making it a valid construct in work settings. Second, coaching has been shown to yield many benefits for employees (Aguinis, 2013; Carr, 2016; Gregory & Levy, 2011). Unlike feedback, coaching encourages and shows how things are done through demonstrations and guidance (Aguinis, 2013; London, 2003; London & Smither, 2002). One key feature that makes employee coaching effective is the future-focused approach to enhance employee capabilities through guidance, facilitation, and inspiration (Gregory & Levy, 2011; Heslin et al., 2006; London & Smither, 2002). Finally, employee coaching can be used in experimental studies, enabling control and manipulation.

Accounting for the positive implications of employee coaching features (i.e., guidance, facilitation, and inspiration), I suggest that employee coaching will positively impact employee responses. Research on transformational leadership has shown that leaders guide and inspire via personal considerations and sharing. Hence, because feedback primarily fails due to its subjectivity and threats to one's self-image (Y. J. Kim & Kim, 2020; London & Smither, 2002), I suggest that these features of employee coaching (i.e., future-and strength-focused, facilitative) reduce self-concerns positively affecting employee responses:

**Hypothesis 2.** Employee coaching will positively affect employee responses to feedback.

# 2.4 | The moderating role of mindset

Sometimes, recipients' personalities might account for the most considerable variance in feedback effects (Raftery & Bizer, 2009; Steelman & Rutkowski, 2004). For example, Murphy (2020) noted that "some performance deficiencies are likely to be a result of the employee's low level of motivation and commitment to the plan" (p. 14). Similarly, London and Smither (2002) stated that employee feedback orientation (i.e., one's propensity to process feedback mindfully or belief in the value of feedback) might influence feedback or coaching receptivity. London and Smither (2002) noted that those high in feedback orientation are more receptive toward coaching since coaching supports the value of feedback and encourages its use.

Relatedly, the prominent researcher on mindset, Dweck et al. (1995), Dweck (2000, 2013), and Dweck and Yeager (2019) argue that one's beliefs on knowledge as malleable or fixed can influence learning orientation. Dweck (2000) states that fostering a growth mindset can facilitate employee learning and growth. Similarly, Jordan and Audia (2012) claimed that differences between individuals' beliefs in knowledge as fixed (fixed mindset) or malleable (growth mindset) explain their reactions toward performance evaluations. According to Jordan and Audia (2012), low performance may indicate a permanent deficit in the job-related ability of fixed mindset individuals. On the contrary,

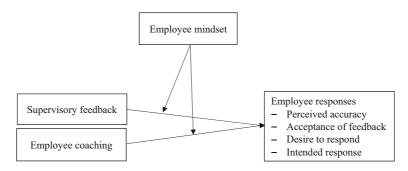


FIGURE 1 Research model.

personal efforts can improve deficiencies for individuals with a growth mindset. Gnepp et al. (2020) reported growth mindset influences how people think about the future. For people with a growth mindset, feedback interventions that focus on improving performance (future-focused feedback) might be more readily accepted than those with a fixed mindset. I investigate whether mindset (growth vs. fixed) moderates the effects of the supervisory feedback on employees' responses:

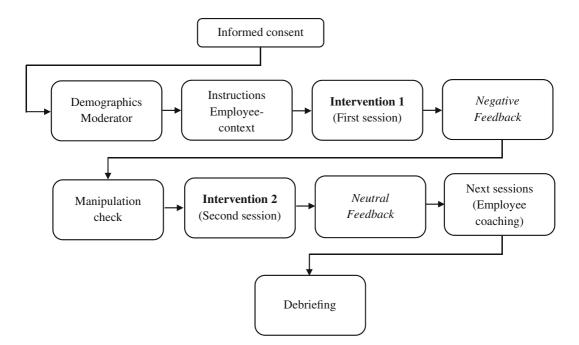
**Hypothesis 3.** Employee mindset will moderate the relationship between experimental condition (i.e., the supervisory negative feedback versus employee coaching) and employee responses, in such a way that growth mindset strengthens these relationships and fixed mindset weakens them.

For an overview of the study variables and hypothesized relationships, see Figure 1.

## 3 | METHODS

# 3.1 | Research design and procedure

I designed four vignettes and conducted two pilot studies to validate the study material. To test the hypotheses, I conducted a laboratory experiment with students from a public university in Germany. I employed a within-subject design and manipulated two independent variables (negative feedback and employee coaching) based on a 2 (negative feedback vs. neutral feedback) by 2 (employee coaching vs. neutral employee coaching) experimental design. Figure 2 shows the overall study procedure for the negative feedback condition. This design offered the exposure of the same individuals to different experimental conditions, allowing for comparative analysis between various conditions within the same subject.



**FIGURE 2** Experimental procedure (i.e., negative and neutral conditions; the same procedure applies to employee coaching conditions); conditions (first feedback and then coaching) were randomized.

# 3.2 | Vignettes

The experimental vignette methodology helps exercise control over independent variables to gather evidence regarding causation in research (Aguinis & Bradley, 2014). Vignettes are also good because they do not require indepth knowledge about the topic and can be easily used to elicit meaning for participants (Hughes & Huby, 2002). They can be presented through images, videos, or written format (Hughes & Huby, 2002). Written vignettes are most appropriate when the research aims to assess explicit processes and outcomes. Moreover, they suit within-subjects research designs (Aguinis & Bradley, 2014). See Supplementary material for a vignette example.

Vignettes tested employee knowledge about a product they work on. Specifically, the vignettes required the participants to read about four different products, answer questions about them, and receive pre-programmed feedback about their answers. After that, I rated their reactions to the feedback. Feedback was given based on their performance (see pilot studies and the Supplementary material).

# 3.3 | Pilot studies

I conducted two pilot studies via Amazon's Mechanical Turk (MTurk) to test and validate vignettes. I employed strict criteria following recommendations by Aguinis et al. (2020).

Respondents were told they would participate in a leadership study in exchange for €1.00. To qualify for the study, participants had to be employees and proficient in English. I also used CAPTCHA for approving valid users and invited only MTurk Master Workers and those with Human Intelligence Task (HIT) approval rates of <95. Finally, I employed attention check questions to measure participants' engagement.

With the two pilot studies, I aimed to answer important questions about vignettes: (1) Can participants complete the study without difficulties, and whether vignettes have the required statistical power (statistical power; i.e., whether they are strong enough to yield the required number of participants)? (2) Will intervention yield some effects on the results of the experiments (intervention power)?

# 3.4 | Pilot study 1

I tested the first question with 32 MTurk participants. I analyzed vignettes' power (i.e., their ability to produce the desired results or a change or progress in recipients' learning processes) by looking at the effects of vignettes. I conducted these analyses in R, using the Ime4 package, by applying the linear mixed-effects models (LME) as a statistical model (Laird & Ware, 1982). I looked at the effect through changes before and after the intervention. For iterations, I used a variation of approach responses. I firstly derived a 2, 3, 4 (questions) by 2, 3, 4 (answers) approach. Results were significant (p < 0.005) with a relatively strong difference after the intervention (between r = 0.18 and 0.29). I further increased the iterations to a  $5 \times 5$  approach. This combination yielded better results in terms of a higher difference after the intervention (p < 0.001, b = 0.34). In the 6  $\times$  6 approach, results were still significant (p < 0.005); however, the strength of the difference after the intervention was lower (b = 0.27) compared to the 5  $\times$  5 approach. Therefore, I decided to proceed with the  $5 \times 5$  approach. In all these iterations, I included the change or progress in recipients' learning processes based on the effects of negative feedback shown by previous research ( $f^2 = 0.19$ ), starting with a 0.50 level of significance (i.e., p before intervention), and adding the expected change (i.e., p after intervention) of 0.19 (0.50 + 0.19 = 69). Thus, the overall effect of vignettes was expected to result in a 15% increase (difference before [0.50], and then adding up the after [+0.19] effect) on recipients' learning processes. Finally, participants rated the difficulty of the vignettes and the respective five answer options. Results showed that around 60% of participants rated both vignettes and answer options as neutral or easy, while the rest as difficult (25%) or very difficult (5%).

# 3.5 | Pilot study 2

I recruited 25 MTurks and conducted inferential statistics to check for the effects of the interventions. I also set inclusion and exclusion criteria due to negative feedback condition. I excluded participants based on scores (i.e., scoring all answer options correctly and disqualifying for negative feedback; n=3), attention check (n=2), and outliers (n=1), resulting in a final sample size of 19 participants. I conducted t-tests and found statistically significant effects of supervisory negative feedback for employee responses but not for all four facets. Specifically, the experimental condition (i.e., supervisory negative feedback) had larger effects on both feedback acceptance (M=3.80) and desire to respond to feedback (M=4.12) compared to the neutral condition (M=3.30; M=3.36), revealing a relatively strong power of intervention.

# 4 | MAIN STUDY: MATERIALS AND PROCEDURE

# 4.1 | Sample size

Based on power analysis, I aimed at a sample size of around 60 participants ( $f^2 = 0.19$ ,  $\alpha = 0.005$ ,  $\beta = 0.80$ ; Faul et al., 2009). However, because of the exclusion and inclusion criteria (e.g., negative feedback, quality check; see pilot study 2), I aimed for 20 additional participants.

#### 4.2 | Measures

# 4.2.1 | Experimental manipulation

#### Randomization of experimental conditions

In addressing potential order effects on the feedback conditions (main conditions and main conditions vs. neutral conditions), the experimental design incorporated randomization at two levels to reduce the sequence of conditions in confounding the results. First, participants were randomly assigned to the two experimental conditions, ensuring an equitable distribution across the main feedback conditions (i.e., negative feedback and employee coaching). Second, within each assigned condition, the order of presentation for neutral feedback and the main feedback intervention was also randomized. This randomization approach helped mitigate any sequence effects, such as primacy or recency biases, that could influence the participants' responses. Randomization of the order in which feedback was presented ensures that the observed effects are attributed to the content and quality of the feedback, rather than the order of its presentation. This, in turn, reduces the potential biases of feedback sequencing.

#### Supervisory negative feedback

Participants were provided negative feedback after performing in the vignette (see Supplementary material for an example). After their answers, a window informed participants that their supervisor was checking their progress and would provide feedback if needed (i.e., those performing well were disqualified, and no feedback was provided). Participants were told to wait for their supervisor's feedback for around 30 s.

I manipulated supervisory negative feedback by including several features based on past research operationalization. I firstly provided outcome feedback (i.e., "your current score is x%") and told participants that their score "does not describe the product optimally and accurately." After that, I provided normative feedback and told them they "scored below average and worse than x% of their peers." I also made feedback specific (i.e., "specifically, this means that you scored only x answers correctly, but x answers incorrectly"). This feedback format includes several features of constructive feedback, such as timely and specific (Belschak & Den Hartog, 2009;

Y. J. Kim & Kim, 2020). In the *neutral condition*, I told participants they "scored in a percentile between 30 and 60" (Y. J. Kim & Kim, 2020).

#### Employee coaching

For employee coaching, I followed the employee coaching elements by Heslin et al. (2006). Heslin et al. (2006) noted guidance (e.g., constructive feedback that helps recipients improve), facilitation (e.g., providing ways to analyze, explore, and solve problems), and inspiration (e.g., challenging employees with ways to develop their potential) as three integral components of employee coaching. Hence, I first provided correct, timely, and constructive feedback (i.e., "Your current score is x%. Unfortunately, your answers describe the product poorly and below average"). After that, I aimed to inspire them after their failure by telling them, "Because this is an important product, we want to help you improve and make progress learning about the product." Further, I encouraged them to explore new ways of solving their learning difficulties by providing some learning strategies and encouraging them "to try various learning strategies." For example, I told them to "try to associate the current product with an application context," or encouraged them "to review material more often and try to compare with other materials that [they] have learned before." Finally, I inspired them by asking them to keep learning and use my feedback for further development (i.e., "... do not be discouraged by your current performance. You should only use your performance, together with my comments, to guide your further learning and improvement").

# 4.2.2 | Moderator: Mindset (growth and fixed mindset)

I employed the Implicit Theory of Intelligence Scale (ITIS) developed by Abd-EI-Fattah and Yates (2006) to measure *mindset*. The scale is comprised of two dimensions, with seven items for each. The first dimension measures *fixed* mindset. A sample item is "You are born with a fixed amount of intelligence." Cronbach's  $\alpha$  was 0.84. The second dimension measures *growth* mindset. A sample item is "Good preparation before performing a task is a way to develop your intelligence." Cronbach's  $\alpha$  was 0.90. Responses ranged between 1 (*strongly disagree*) to 5 (*strongly agree*) for both parts. I reverse-coded the *fixed* mindset and took the average of fixed and growth mindset dimensions to create a single mindset variable. In this variable, higher scores indicate a growth mindset and lower scores indicate fixed mindset.

# 4.2.3 | Outcome: Employees' responses to feedback

I used a five-item measure Kinicki et al. (2004) developed to measure perceived accuracy. A sample item was "The information discussed at the appraisal session was accurate." For the *acceptance of feedback*, I used four items from Anseel and Lievens (2009). A sample item was "The feedback I received was an accurate evaluation of my performance." The *desire to respond* was measured using four items from Kinicki et al. (2004). A sample item was "I have no intention of using the feedback to guide my performance on the next task." Finally, I used one item from Anseel and Lievens (2009) for the *intended response*. The item was: "Because of my most recent performance appraisal session, I intend to put forth a great deal of additional effort towards doing my job." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's α were acceptable to very good (between 0.77 and 0.95).

# 5 | STATISTICAL ANALYSES

I applied both descriptive and inferential analyses. I conducted descriptive and factor analyses (i.e., confirmatory factor analyses) for the measures' qualities. In addition, I employed regression and moderation analyses to test the main

hypotheses (direct and moderation effects). Further, I used a structural equation modeling technique, path analysis, to check for differences between employee responses facets. I used SPSS and R for the analyses.

# 6 │ RESULTS: MAIN STUDY

I conducted a laboratory experiment with students from a public university in Germany. Before data collection, I preregistered the study in the open science framework (https://osf.io/9hkfz/). I collected the data between June 2021 and October 2022. Students were invited to take part in return for university credits. In addition, they were offered private feedback on their performance and a chance to participate in a lottery of €50. Because vignettes were designed and tested in English, I translated them and the study measures (English to German) via the backtranslation method with the help of three PhD researchers proficient in German (native) and English. Researchers noted one item as difficult to understand, which was discussed with a third researcher. Before the experiment, I submitted vignettes and study procedures to the university ethics committee for approval (dossier number: 2021-04/17).

I was able to collect data from 78 students. However, I excluded eight participants due to their good performance (i.e., scoring all answer options in the vignette correctly, making them ineligible for negative feedback) and one participant due to failure in attention check questions. Hence, the final sample was 69 participants (56% female;  $M_{\rm age} = 24.62$  years,  $SD_{\rm age} = 6.32$ ). Most participants were from Germany (92%), held a Bachelor's degree (34.8%), and were employed, with 42% over 5 years of work experience.

# 6.1 | Study 1: Manipulation check

I tested whether manipulation had the desired effects by asking participants a single question after supervisory feedback and employee coaching: "To what degree did you find the comments of your supervisor helpful?" Participants indicated their answers on a scale of 1 (not helpful) to 7 (very helpful).

I conducted a paired sample t-test to measure if the manipulation check worked. Results revealed differences in the effects for both negative feedback (M = 3.60; SD = 2.09) versus neutral condition (M = 3.22; SD = 1.58), and employee coaching (M = 6.12; SD = 1.44) versus neutral condition (M = 3.29; SD = 1.45). These differences were significant for employee coaching (t(64) = 10.889, p < 0.001), but not for the negative feedback (t(66) = 0.991, p > 0.005).

## 6.2 Main study: Descriptive statistics and confirmatory factor analysis

Table 1 summarizes descriptive statistics and correlations between study variables. Significant correlations existed between the experimental conditions and all four facets of employee responses (between r = 0.19 and 0.54, p < 0.005). Similarly, the growth mindset correlated positively with all four facets of employee responses (e.g., feedback acceptance: r = 0.54, p < 0.005).

I also conducted confirmatory factor analysis (CFA) to check for the fit of the measurement models within the assumed models (Table 2). I conducted one and two-factor models (for the moderator) and one and four models for employee responses (the outcome). Results confirmed the theoretically assumed models. Compared to the one-factor model, the two-factor model for the moderator showed a much better fit ( $\chi^2 = 186.558$ , df = 91, comparative fit index (CFI) = 0.77, tucker-lewis index (TLI) = 0.70, root mean square error of approximation (RMSEA) = 0.14, standardized root mean square residual (SRMR) = 0.19). Similarly, compared to the one-factor model, the (original) four-factor model of employee responses had a better model fit ( $\chi^2 = 429.030$ , df = 55, CFI = 0.90, TLI = 0.95, RMSEA = 0.12, SRMR = 0.09).

								-		
Variable	М	SD	1	2	3	4	5	6	7	8
1. Gender	0.58	0.50								
2. Age	24.62	6.30	0.05							
3. Condition	0.50	0.50	0.00	0.00						
4. Fixed mindset	2.15	0.80	0.18*	0.06	0.00					
5. Growth mindset	3.84	0.93	0.09	-0.04	0.00	-0.28**				
6. Perceived accuracy	4.34	1.48	-0.08	-0.18 <b>*</b>	0.24**	0.01	0.34**			
7. Feedback acceptance	4.33	1.32	-0.04	-0.23**	0.19*	0.04	0.41**	0.70**		
8. Desire to respond	3.36	0.88	0.02	-0.14	0.54**	0.04	0.18*	0.44**	0.46**	
9. Intended response	3.69	1.12	0.01	-0.08	0.35**	0.08	0.24**	0.42**	0.56**	0.56**

TABLE 1 Means (M), standard deviations (SD), and zero-order correlations between study variables.

*Note*: Condition refers to negative feedback (0) and employee coaching (1). Gender: 1 = male, 2 = female. \*p < 0.05; \*\*p < 0.01.

TABLE 2 Confirmatory factor analyses with different factor models for the study variables.

Model	χ²	df	CFI	TLI	RMSEA	SRMR	AIC	BIC
Moderator								
One-factor model	294.461	91	0.54	0.46	0.21	0.19	2615.278	2676.161
Two-factors model	186.558	91	0.77	0.70	0.14	0.12	2509.374	2572.432
Outcomes								
One-factor model	537.265	66	0.79	0.74	0.16	0.10	2692.661	2745.929
Four-factors model	429.030	55	0.90	0.94	0.12	0.09	2654.676	2719.041

Note: One-factor model: Fixed and growth mindset, together; Two-factor model: Fixed and growth mindset, separately (original model); One-factor model: Perceived accuracy, acceptance of feedback, desire to respond to feedback, and intended response, together; Four-factor model: Perceived accuracy, acceptance of feedback, desire to respond to feedback, and intended response, separately.

Abbreviations: AIC, akaike information criterion; BIC, bayesian information criterion; CFI, comparative fit index; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual; TLI, tucker-lewis index.

## 6.3 | Main study: Hypotheses testing

I conducted repeated measures analysis of variance for each employee responses facet. I found the conditions to significantly differ for all employee responses facets: the desire to respond, intended response, feedback acceptance, and perceived accuracy (F(2.32, 148) = 83.20, p < 0.001, F(3, 192) = 29.1, p < 0.001, F(2.34, 150) = 17.6, p < 0.001 and F(2.56, 164) = 25.4, p < 0.001, respectively). After that, I conducted pairwise t-tests with Bonferroni correction to detect which conditions differ significantly in each facet of the feedback conditions.

In the first hypothesis, I expected that negative feedback would have a negative effect on employee responses. The results did not support this hypothesis. However, there was a difference in the effects, with negative feedback having larger effects on all four employee responses facets (feedback acceptance, M = 4.08, SD = 1.35; perceived accuracy, M = 3.99, SD = 1.32; intended response, M = 3.30, SD = 1.11; and desire to respond, M = 2.89, SD = 0.80), compared to neutral condition (feedback acceptance, M = 3.40, SD = 0.88; perceived accuracy, M = 3.05, SD = 1.02; intended response, M = 2.78, SD = 1.20; and desire to respond, M = 2.38, SD = 0.70). These differences were statistically significant (e.g., for the desire to respond; t(64) = 5.25, p < 0.001). However, results confirmed the second and third hypotheses with employee coaching having larger positive effect on all facets of

employee responses (feedback acceptance, M = 4.59, SD = 1.25; perceived accuracy, M = 4.70, SD = 1.56; intended response, M = 4.09, SD = 0.99; and desire to respond, M = 3.85, SD = 0.68), compared to both neutral condition and negative feedback. These differences were statistically significant (e.g., for the desire to respond, t(64) = 11.31, p < 0.001; see Table 3). Table 4 compares the effects of each condition on employee responses facets.

Furthermore, I tested the moderating role of employee mindset (Figure 3) for the relationship between conditions (negative feedback vs. employee coaching) and employee responses. The results yielded a significant interaction between condition and mindset in predicting perceived accuracy (b=0.81, p<0.05), feedback acceptance (b=0.70, p<0.05) and intended response (b=0.73, p<0.05) but not desire to respond (b=0.01, p>0.05). For further details, see Table 5. Later, I conducted simple slope analyses for perceived accuracy, feedback acceptance, and intended response because the interaction between condition and mindset was significant for these facets of employee responses. The results showed that growth mindset strengthened the relationship between employee coaching condition and employee responses (e.g., feedback accuracy; b=0.72, t=4.02, p<0.005). However, this difference was not significant for fixed mindset (-1 SD; b=-0.66, t=0.75, p>0.005). I found the same pattern of difference for feedback acceptance (growth mindset: b=0.72, t=3.23, p<0.005; fixed mindset: b=-0.66, t=0.11, t=0.005, and intended response (growth mindset: t=0.72, t=0.005). For further details, see Figure 3.

Finally, although I did not hypothesize the relationship between each employee responses facet, following Ilgen et al.'s (1979) feedback processing model, I investigated whether there would be differences in the effects between each of the four. According to Ilgen et al. (1979), employee responses follows a pattern involving cognitive (perceptions and acceptance) and motivational (desire and intentions) processes. I must ensure that effects are robust across

TABLE 3 Means (M) and standard deviations (SD) for the effects of conditions on employee responses facets.

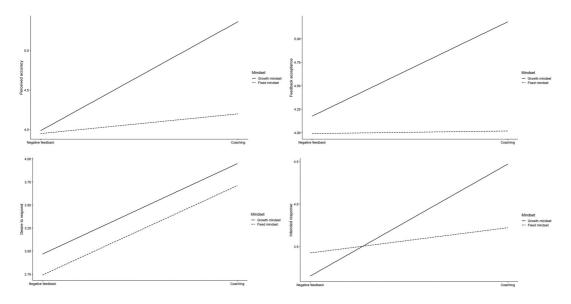
	Employee responses									
	Feedback	k acceptance	Perceive	ed accuracy	Desire to respond		Intended response			
Conditions	М	SD	М	SD	М	SD	М	SD		
Employee coaching	4.95	1.24	4.70	1.56	3.84	0.68	4.10	1.00		
Neutral coaching	3.54	1.05	3.40	1.10	2.41	0.79	2.59	1.10		
Negative feedback	4.08	1.35	4.00	1.32	2.89	0.81	3.31	1.11		
Neutral feedback	3.40	0.89	3.05	1.02	2.39	0.71	2.78	1.20		

Note: N = 65-68.

TABLE 4 Pairwise comparisons between the experimental conditions for employee responses facets.

	Employee responses									
	Perceived accuracy		Feedback acceptance		Desire to respond		Intended response			
Comparison		р	t	р	t	р	t	р		
Employee coaching versus negative feedback	3.61	0.00	3.23	0.01	7.69	0.00	4.63	0.00		
Employee coaching versus neutral coaching	5.68	0.00	5.21	0.00	11.31	0.00	8.72	0.00		
Negative feedback versus neutral feedback	4.86	0.00	3.42	0.01	5.25	0.00	2.79	0.04		
Neutral coaching versus neutral feedback		0.18	1.02	1.00	0.25	1.00	-1.25	1.00		

Note: N = 64.



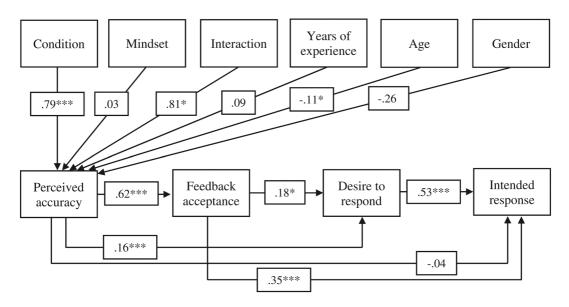
**FIGURE 3** Regression slopes for the interaction of employee coaching and negative feedback and mindset on each employee response facets.

**TABLE 5** Regression results for the main study variables and employee responses facets.

	Perceived	Perceived accuracy		acceptance	Desire to	respond	Intended response	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Predictor	b	b	b	b	b	b	b	b
(Intercept)	6.45**	6.46**	6.28**	6.29**	3.72**	3.72**	3.40**	3.41**
Condition	0.81**	0.79**	0.52*	0.50*	0.98**	0.98**	0.81**	0.79**
Mindset	0.43*	0.03	0.49**	0.13	0.17	0.16	0.17	-0.20
Age	-0.11*	-0.11*	-0.10*	-0.10*	-0.04	-0.04	-0.00	-0.00
Gender	-0.26	-0.26	-0.04	-0.04	0.12	0.12	0.04	0.04
Interaction		0.81*		0.70*		0.01		0.73**
F	5.34**	5.51**	4.94**	5.07**	13.10**	10.80**	4.00**	4.69**
$R^2$	0.18	0.22	0.17	0.21	0.36	0.36	0.15	0.19
$\Delta F^2$ versus Model 1		5.41*		4.91*		0.00		7.14**
$\Delta R^2$ versus Model 1		0.04		0.04		0.00		0.04

Note: Unstandardized regressions are reported. Condition: 0 = Negative feedback, 1 = Employee coaching. Mindset: 0 = Fixed mindset, 1 = Growth mindset. Interaction: Condition versus mindset. \*p < 0.05; \*\*p < 0.01.

these four feedback mechanisms. Therefore, using path analysis, I checked whether there are differences in the effects for each facet of employee responses, namely perceived accuracy, feedback acceptance, desire to respond to feedback, and intended response. Figure 4 shows the results of the path analysis. First, results revealed a strong positive effect of the interaction between the main experimental conditions (b = 0.81, t(75) = 2.48, p < 0.001), namely negative feedback and employee coaching, and mindset. Similarly, condition effects revealed a large effect of employee coaching on employee responses (i.e., perceived accuracy; b = 0.79, t(20) = 4.14, p < 0.001) compared to negative feedback. Second, in line with Ilgen et al. (1979), results show that effects vary across the four facets of



**FIGURE 4** Path analysis results. Standardized path coefficients are presented. Mindset: 1 = Growth mindset. Condition: 0 = Negative feedback. Interaction = Conditions versus mindset. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.01.

employee responses as the outcome in this study. While perceived accuracy had a large effect on feedback acceptance (b = 0.62, p < 0.001), the transition from feedback acceptance to the desire to respond to feedback reveals a smaller effect (b = 0.18, p < 0.005). However, the effect gets larger from the desire to respond to the intended response (b = 0.62, p < 0.001). These results reveal that employees perceive feedback as accurate, accept it, and express a desire and intention to respond.

# 7 | DISCUSSION

The main objective of this study was to add to research on feedback by investigating whether the focus of supervisory feedback makes a difference in employees' responses to feedback. In line with expectations, I found that employee coaching is a better intervention for facilitative feedback processing than negative feedback. Similarly, I found that employee mindset moderates the relationship between negative feedback and employee coaching and employee responses. By investigating the theoretical model in a laboratory experiment, I was able to draw causal inferences about the hypothesized relationships between key study variables.

# 7.1 | Theoretical implications and practical contributions

The results of this study yield several theoretical and practical implications for organizational feedback interventions and HRD practices. By integrating relevant theoretical frameworks, I contribute to theory and practice regarding the implications of the (often)-contradictory findings regarding feedback interventions.

Theoretically, this research showed that whether supervisors focus on employees' past performance or future could make a difference in employee responses to their feedback. Traditionally, supervisory feedback has been criticized mainly due to the threat it yields to the recipients' ego and self-image (Belschak & Den Hartog, 2009; Kluger & DeNisi, 1996). In addition, critics note the difficulty of evaluating one's past performance due to biases in subjective evaluations (Adler et al., 2016; Gnepp et al., 2020; Murphy, 2020). With this research, I contribute to this stream of criticism by investigating how the focus of supervisory feedback can yield better effects on how employees react to

it. I found that employee coaching, which focuses on the future and aims to facilitate and guide one's work performance, could mitigate these adverse effects of supervisory feedback. Indeed, a recent study found that even negative feedback can yield positive effects when it is future-framed (Tarantelli et al., 2022). Hence, theoretical frameworks should aim at merging more future-focused approaches shown to be more effective for employees' responses to feedback.

In addition, I add to FIT (Kluger & DeNisi, 1996) by investigating the implications of employee personality and their responses. FIT noted personality factors as possible moderators in the relationship between feedback and one's job performance. These findings showed that employee mindset can affect how employees respond to feedback. Results revealed that a growth mindset significantly moderates the relationship between supervisory feedback and employee responses. For employee coaching, results showed a significant positive difference in effects. Hence, in addition to personality factors noted by the FIT (Kluger & DeNisi, 1996), future research and FIT must note the implications that both personality and the feedback format have for employee responses. Recent research shows that both personality and format of feedback have implications on how employees react to feedback (Eskreis-Winkler & Fishbach, 2019; Fenwick et al., 2019; J. Kim et al., 2024; Tarantelli et al., 2022; Zyberaj, 2024) and their subsequent job performance (Goller & Späth, 2023; Keith et al., 2022; Y. J. Kim & Kim, 2020).

Practically, these findings support the many research claims and findings on the implications of future-focused forms of feedback (Gnepp et al., 2020; Heslin et al., 2006; Murphy, 2020; Tarantelli et al., 2022). First, in line with previous research and theories (Bouskila-Yam & Kluger, 2011; Heslin et al., 2006; Kluger & Nir, 2010), I found that focus of supervisory feedback about employee job performance can make a difference in how they respond to feedback. Findings showed that employee coaching yields positive employee responses to supervisory feedback. Hence, I adhere to calls to refrain from providing only past-focused and error-based feedback that can reduce employee efforts (Aguinis et al., 2012; Murphy, 2020). Instead, supervisors should employ more coaching- and strengths-based approaches. For instance, leaders can use transformational leadership (Fenwick et al., 2019; Stoker et al., 2012) and future- and strength-based approaches (Aguinis et al., 2012; Bouskila-Yam & Kluger, 2011; Gnepp et al., 2020; Kluger & Nir, 2010) that align with employee coaching aiming to facilitate, guide, and inspire employees (Heslin et al., 2006; London & Smither, 2002). By providing future-focused feedback, supervisors increase the chances that employees accept feedback and increase their motivation to use it further.

Moreover, findings encourage supervisors to pay attention to the employees' personalities. Results showed that employees with a growth mindset process employee coaching much better than those with a fixed mindset. This aligns with past research noting the significance of employees' personality for job performance (Cutumisu & Lou, 2020; Ilgen et al., 1979; Jordan & Audia, 2012; Y. J. Kim & Kim, 2020; London et al., 2023b). However, different from past research, I investigate the implications of employee mindset concerning their reactions to feedback. Employee reactions can help us explain when and how employees engage in self-concerns after feedback (Eskreis-Winkler & Fishbach, 2019; Jordan & Audia, 2012; Keith et al., 2022). For instance, Jordan and Audia (2012) noted that an organizational culture that emphasizes a growth mindset might reduce defensive self-enhancement. For employees to benefit from employee coaching (and negative feedback), organizations should enhance employee mindset by installing a culture that embraces employee failure and supports learning and growth, which would attenuate employee tendencies for mere self-enhancement and react to feedback more positively. A recent review found that for mindset interventions to be effective, organizations should account for different stakeholders involved in change processes and involve all levels of organizations, including teams and organizations (Han & Stieha, 2020). Indeed, a large national experiment found that context plays a major role in positive mindset interventions (Yeager et al., 2019). Hence, organizations might aim to intervene in supervisors (i.e., increasing their beliefs that such interventions work) and simultaneously train employees for more positive attitudes toward learning and growth.

Finally, different from past research, I add to feedback research by investigating various cognitive and motivational mechanisms that might explain the failure of feedback interventions. Following the feedback processing model of Ilgen et al. (1979), I cast light on employee responses to supervisory feedback. The importance of employee reactions was also noted by the FIT (Kluger & DeNisi, 1996), stating the need for research that focuses "on the processes

induced by [feedback interventions] Fls and not on the general question of whether Fls improve performance" (p. 278). In line with these calls and the theory of planned behavior (Ajzen, 1991), path analysis results showed that there are differences in reactions between the cognitive (perceptions and acceptance) and motivational (desire and intentions) mechanisms of feedback processing. Often, employees' expression of feedback acceptance might not denote their motivation to use it. Hence, supervisors should heed employee reactions and ensure employees express both acceptance and desire to use the feedback. This, in turn, increases the chances for better job-related outcomes.

# 7.1.1 | Practical implications for the HRD interventions

The present study offers several insights for HRD practitioners. First, it encourages the adoption of coaching as a key supervisory function and a future-focused approach, emphasizing the need for supervisors to focus on guiding employees toward future achievements rather than dwelling on past performance shortcomings. This approach mitigates the negative impacts of feedback and aligns with developmental coaching practices that foster employee growth. Second, understanding that employee mindset plays a critical role in how feedback is processed and acted upon, HRD strategies can include mindset development programs. Such programs can help cultivate a growth mindset across the organization, thereby enhancing the receptivity and utility of feedback. Organizations can also consider training supervisors to deliver feedback that supports a growth mindset, encouraging resilience and a continuous improvement outlook among employees. Third, study findings advocate for a nuanced understanding of feedback mechanisms, suggesting that HRD interventions should be multifaceted, incorporating both cognitive and motivational components of employee responses. This holistic approach ensures that feedback is accepted and motivates employees toward positive change, a prerequisite for better job performance.

By integrating insights from this research into HRD practices, organizations can better leverage feedback for employee development. Emphasizing future-focused feedback and fostering growth mindsets are key strategies for enhancing the effectiveness of feedback interventions. These approaches contribute to positive employee development outcomes and support the overall organizational learning and growth culture, aligning HRD practices with the dynamic needs of the contemporary workforce.

## 7.2 | Limitations and future research

Although I employed a robust research design, the study has some limitations that can be reduced by future research. First, although I carefully designed and validated the vignettes utilized for the experiment, the task type I used might have implications for the results. I did try to contextualize the task. However, it might be important to consider it. Research has shown that task type moderates the relationship between feedback and performance (e. g., van Dijk & Kluger, 2011). A study found that images depicting performance success could benefit negative feedback (Itzchakov & Latham, 2020). Hence, future research might consider validating these findings with a field experiment, which would naturally represent employee tasks or involve different task types with the same experimental procedure. Second, although I constructed a set of variations in the negative feedback aligning with previous research, I included mainly normative feedback and evaluated employee performance compared to peers' performance. This type of negative feedback might increase dissatisfaction with feedback and employees could react strongly against it. Feedback can often be misunderstood, which could affect how others react to it (Deeley et al., 2019). Thus, future scholars could examine employee reactions by eliminating normative feedback, referring to one's performance alone. Third, I used employee reactions and did not investigate employee performance further. Following the theories and the research findings I utilized, I firmly believe that reactions are good indicators of subsequent employee performance. Motivation is a good predictor of job performance (Hemakumara, 2020; Kopelman & Thompson, 1976). However, I encourage future research to employ job-related outcomes for more insights into the implications of employee responses to feedback. Fourth, because moderator effects are usually weak in power and stability, current results must be replicated with a larger sample. Finally, the current study participants were from Germany, which has implications for the generalizability of the findings. Hence, future research should validate these findings in other cultures and contexts.

#### 8 | CONCLUSION

In this study, I aimed to contribute to factors that could explain the failure of supervisory performance feedback. I proposed that the focus of supervisory feedback could make a difference in how employees react to it and suggest employee mindset to moderate these relationships. Results supported my propositions. Although findings show positive reactions to negative feedback and employee coaching, the latter had much larger effects. Following these findings, supervisors should adopt future-focused approaches that support employee learning and growth via facilitation and guidance. Employee coaching reduces possible adverse reactions and increases chances for mindful processing of supervisory feedback. Similarly, organizations should target enhancing employee growth mindset, which moderates the effects of employee coaching. Moreover, I found that a positive interaction between employee coaching and mindset might yield the best positive reactions. Hence, organizations should simultaneously aim to enhance supervisory feedback and employee mindset for effective HRD interventions. Finally, more attention should be given to employee reactions concerning supervisory feedback than direct job outcomes. Employee acceptance of feedback does not denote one's motivation to utilize it. Failure in one's job performance after feedback might indicate that employees did not intend to use what they claimed to have accepted. Thus, organizations should train employees to be more receptive to supervisory feedback and find ways to boost their motivation to apply it on the job.

#### **ACKNOWLEDGMENTS**

I thank Cafer Bakaç and Manuel London for their valuable feedback on an earlier version of the manuscript. I am especially thankful to the Editor and the three anonymous reviewers for their time and effort throughout the revision process. The publication of this article was supported by the Open Access publication fund of the University of Bamberg. Open Access funding enabled and organized by Projekt DEAL.

#### **DATA AVAILABILITY STATEMENT**

The data that support the findings of this study are available from the corresponding author upon reasonable request. Due to privacy and ethical concerns, the data are not publicly available but may be shared under specific conditions.

#### ORCID

Jetmir Zyberaj https://orcid.org/0000-0002-3871-002X

#### REFERENCES

Abd-El-Fattah, M. S., & Yates, G. (2006). Implicit theory of intelligence scale: Testing for factorial invariance and mean structure. Australian Association for Research in Education.

Adler, S., Campion, M., Colquitt, A., Grubb, A., Murphy, K., Ollander-Krane, R., & Pulakos, E. D. (2016). Getting rid of performance ratings: Genius or folly? A debate. *Industrial and Organizational Psychology*, 9(2), 219–252. https://doi.org/10.1017/iop.2015.106

Aguinis, H. (2013). Performance management (3rd ed.). Pearson.

Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, 17(4), 351–371. https://doi.org/10.1177/1094428114547952

Aguinis, H., Gottfredson, R. K., & Joo, H. (2012). Delivering effective performance feedback: The strengths-based approach. Business Horizons, 55(2), 105–111. https://doi.org/10.1016/j.bushor.2011.10.004

Aguinis, H., Villamor, I., & Ramani, R. S. (2020). MTurk research: Review and recommendations. *Journal of Management*, 47, 823–837. https://doi.org/10.1177/0149206320969787

- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
- Anseel, F., & Lievens, F. (2009). The mediating role of feedback acceptance in the relationship between feedback and attitudinal and performance outcomes. *International Journal of Selection and Assessment*, 17(4), 362–376. https://doi.org/10.1111/j.1468-2389.2009.00479.x
- Anseel, F., Van Yperen, N. W., Janssen, O., & Duyck, W. (2011). Feedback type as a moderator of the relationship between achievement goals and feedback reactions. *Journal of Occupational and Organizational Psychology*, 84(4), 703–722. https://doi.org/10.1348/096317910x516372
- Belschak, F. D., & Den Hartog, D. N. (2009). Consequences of positive and negative feedback: The impact on emotions and extra-role behaviors. *Applied Psychology*, 58(2), 274–303. https://doi.org/10.1111/j.1464-0597.2008.00336.x
- Bouskila-Yam, O., & Kluger, A. N. (2011). Strength-based performance appraisal and goal setting. *Human Resource Management Review*, 21(2), 137–147. https://doi.org/10.1016/j.hrmr.2010.09.001
- Brett, J. F., & Atwater, L. E. (2001). 360 degree feedback: Accuracy, reactions, and perceptions of usefulness. *Journal of Applied Psychology*, 86(5), 930–942. https://doi.org/10.1037/0021-9010.86.5.930
- Budworth, M.-H., Latham, G. P., & Manroop, L. (2015). Looking forward to performance improvement: A field test of the feedforward interview for performance management. *Human Resource Management*, 54(1), 45–54. https://doi.org/10.1002/hrm.21618
- Carr. (2016). Executive and employee coaching: Research and best practices for practitioners. White Paper. Society for Industrial and Organizational Psychology.
- Chun, J. S., Brockner, J., & De Cremer, D. (2018). How temporal and social comparisons in performance evaluation affect fairness perceptions. *Organizational Behavior and Human Decision Processes*, 145, 1–15. https://doi.org/10.1016/j.obhdp.2018.01.003
- Cutumisu, M., & Lou, N. M. (2020). The moderating effect of mindset on the relationship between university students' critical feedback-seeking and learning. *Computers in Human Behavior*, 112, 106445. https://doi.org/10.1016/j.chb.2020. 106445
- Deeley, S. J., Fischbacher-Smith, M., Karadzhov, D., & Koristashevskaya, E. (2019). Exploring the 'wicked' problem of student dissatisfaction with assessment and feedback in higher education. *Higher Education Pedagogies*, 4(1), 385–405. https://doi.org/10.1080/23752696.2019.1644659
- DeNisi, A. A., & Murphy, K. (2017). Performance appraisal and performance management: 100 years of progress? *The Journal of Applied Psychology*, 102(3), 421–433. https://doi.org/10.1037/apl0000085
- Dweck, C. S. (2000). Self-theories: Their role in motivation, personality, and development. Essays in social psychology. Psychology Press.
- Dweck, C. S. (2013). Self-theories: Their role in motivation, personality, and development. Essays in social psychology. Taylor and Francis.
- Dweck, C. S. (2017). Mindset: Changing the way you think to fulfil your potential. Robinson.
- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological Inquiry*, 6(4), 267–285. https://doi.org/10.1207/s15327965pli0604\_1
- Dweck, C. S., & Yeager, D. S. (2019). Mindsets: A view from two eras. Perspectives on Psychological Science, 14(3), 481–496. https://doi.org/10.1177/1745691618804166
- Eskreis-Winkler, L., & Fishbach, A. (2019). Not learning from failure-the greatest failure of all. *Psychological Science*, 30(12), 1733–1744. https://doi.org/10.1177/0956797619881133
- Eva, N., Meacham, H., Newman, A., Schwarz, G., & Tham, T. L. (2019). Is coworker feedback more important than supervisor feedback for increasing innovative behavior? *Human Resource Management*, 58(4), 383–396. https://doi.org/10.1002/hrm.21960
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149
- Fenwick, K. M., Brimhall, K. C., Hurlburt, M., & Aarons, G. (2019). Who wants feedback? Effects of transformational leadership and leader-member exchange on mental health practitioners' attitudes toward feedback. *Psychiatric Services*, 70(1), 11–18. https://doi.org/10.1176/appi.ps.201800164
- Gnepp, J., Klayman, J., Williamson, I. O., & Barlas, S. (2020). The future of feedback: Motivating performance improvement through future-focused feedback. *PLoS One*, 15(6), e0234444. https://doi.org/10.1371/journal.pone.0234444
- Goller, D., & Späth, M. (2023). "Good job!" The impact of positive and negative feedback on performance. In arXiv [econ. GN]. http://arxiv.org/abs/2301.11776
- Gregory, J. B., & Levy, P. (2011). It's not me, it's you: A multilevel examination of variables that impact employee coaching relationships. Consulting Psychology Journal: Practice and Research, 63(2), 67–88. https://doi.org/10.1037/a0024152
- Han, S. J., & Stieha, V. (2020). Growth mindset for human resource development: A scoping review of the literature with recommended interventions. Human Resource Development Review, 19(3), 309–331. https://doi.org/10.1177/1534484320939739

- Hemakumara, H. (2020). The impact of motivation on job performance: A review of literature. *Journal of Human Resources Management and Labor Studies*, 8(2), 24–29. https://doi.org/10.15640/jhrmls.v8n2a3
- Heslin, A., Vandewalle, D., & Latham, P. (2006). Keen to help? Managers' implicit person theories and their subsequent employee coaching. *Personnel Psychology*, 59(4), 871–902. https://doi.org/10.1111/j.1744-6570.2006.00057.x
- Hsieh, H.-H., & Huang, J.-T. (2018). Exploring factors influencing employees' impression management feedback-seeking behavior: The role of managerial coaching skills and affective trust. *Human Resource Development Quarterly*, 29(2), 163–180. https://doi.org/10.1002/hrdq.21311
- Hughes, R., & Huby, M. (2002). The application of vignettes in social and nursing research. *Journal of Advanced Nursing*, 37 (4), 382–386. https://doi.org/10.1046/j.1365-2648.2002.02100.x
- Ilgen, D. R., Fisher, C. D., & Taylor, M. S. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology*, 64(4), 349–371. https://doi.org/10.1037/0021-9010.64.4.349
- Itzchakov, G., & Latham, G. P. (2020). The moderating effect of performance feedback and the mediating effect of self-set goals on the primed goal-performance relationship. *Applied Psychology*, 69(2), 379–414. https://doi.org/10.1111/apps. 12176
- Jordan, A. H., & Audia, P. G. (2012). Self-enhancement and learning from performance feedback. Academy of Management Review, 37(2), 211–231. https://doi.org/10.5465/amr.2010.0108
- Keating, L. A., & Heslin, P. A. (2015). The potential role of mindsets in unleashing employee engagement. *Human Resource Management Review*, 25(4), 329–341. https://doi.org/10.1016/j.hrmr.2015.01.008
- Keeping, L. M., & Levy, P. E. (2000). Performance appraisal reactions: Measurement, modeling, and method bias. *Journal of Applied Psychology*, 85(5), 708–723. https://doi.org/10.1037//0021-9010.85.5.708
- Keith, N., Horvath, D., Klamar, A., & Frese, M. (2022). Failure to learn from failure is mitigated by loss-framing and corrective feedback: A replication and test of the boundary conditions of the tune-out effect. *Journal of Experimental Psychology*. *General*, 151(8), e19-e25. https://doi.org/10.1037/xge0001170
- Kim, J., Zitek, E. M., & Stroup, C. M. (2024). The power of words: Employee responses to numerical vs. narrative performance feedback. *Academy of Management Discoveries*. https://doi.org/10.5465/amd.2023.0308
- Kim, Y. J., & Kim, J. (2020). Does negative feedback benefit (or harm) recipient creativity? The role of the direction of feedback flow. *Academy of Management Journal*, 63(2), 584–612. https://doi.org/10.5465/amj.2016.1196
- Kinicki, A. J., Prussia, G. E., Wu, B., & McKee-Ryan, F. M. (2004). A covariance structure analysis of employees' response to performance feedback. *Journal of Applied Psychology*, 89(6), 1057–1069. https://doi.org/10.1037/0021-9010.89.6.1057
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254–284. https://doi.org/10.1037/0033-2909.119.2.254
- Kluger, A. N., & Nir, D. (2010). The feedforward interview. Human Resource Management Review, 20(3), 235–246. https://doi.org/10.1016/j.hrmr.2009.08.002
- Kopelman, R. E., & Thompson, P. H. (1976). Boundary conditions for expectancy theory predictions of work motivation and job performance. Academy of Management Journal, 19(2), 237–258. https://doi.org/10.5465/255775
- Laird, N. M., & Ware, J. H. (1982). Random-effects models for longitudinal data. *Biometrics*, 38(4), 963–974. https://doi.org/10.2307/2529876
- Lechermeier, J., & Fassnacht, M. (2018). How do performance feedback characteristics influence recipients' reactions? A state-of-the-art review on feedback source, timing, and valence effects. *Management Review Quarterly*, 68(2), 145–193. https://doi.org/10.1007/s11301-018-0136-8
- London, M. (2003). Job feedback: Giving, seeking, and using feedback for performance improvement (2nd ed.). Lawrence Erlbaum Associates.
- London, M., & Smither, J. W. (2002). Feedback orientation, feedback culture, and the longitudinal performance management process. *Human Resource Management Review*, 12(1), 81–100. https://doi.org/10.1016/S1053-4822(01)00043-2
- London, M., Volmer, J., Zyberaj, J., & Kluger, A. N. (2023a). Gaining feedback acceptance: Leader-member attachment style and psychological safety. *Human Resource Management Review*, 33(2), 100953. https://doi.org/10.1016/j.hrmr.2023. 100953
- London, M., Volmer, J., Zyberaj, J., & Kluger, A. N. (2023b). Attachment style and quality listening: Keys to meaningful feed-back and stronger leader-member connections. *Organizational Dynamics*, 52(2), 100977. https://doi.org/10.1016/j.orgdyn.2023.100977
- Murphy, K. R. (2020). Performance evaluation will not die, but it should. Human Resource Management Journal, 30(1), 13–31. https://doi.org/10.1111/1748-8583.12259
- Nieminen, L. R. G., Smerek, R., Kotrba, L., & Denison, D. (2013). What does an executive coaching intervention add beyond facilitated multisource feedback? Effects on leader self-ratings and perceived effectiveness. Human Resource Development Quarterly, 24(2), 145–176. https://doi.org/10.1002/hrdq.21152
- Pichler, S. (2012). The social context of performance appraisal and appraisal reactions: A meta-analysis. *Human Resource Management*, 51(5), 709–732. https://doi.org/10.1002/hrm.21499

- Pichler, S., Beenen, G., & Wood, S. (2020). Feedback frequency and appraisal reactions: A meta-analytic test of moderators. The International Journal of Human Resource Management, 31(17), 2238–2263. https://doi.org/10.1080/09585192. 2018.1443961
- Raftery, J. N., & Bizer, G. Y. (2009). Negative feedback and performance: The moderating effect of emotion regulation. *Personality and Individual Differences*, 47(5), 481–486. https://doi.org/10.1016/j.paid.2009.04.024
- Rasheed, A., Khan, S.-U.-R., Rasheed, M. F., & Munir, Y. (2015). The impact of feedback orientation and the effect of satisfaction with feedback on in-role job performance. *Human Resource Development Quarterly*, 26(1), 31–51. https://doi.org/10.1002/hrdq.21202
- Sheldon, O. J., Dunning, D., & Ames, D. R. (2014). Emotionally unskilled, unaware, and uninterested in learning more: Reactions to feedback about deficits in emotional intelligence. *The Journal of Applied Psychology*, 99(1), 125–137. https://doi.org/10.1037/a0034138
- Shrauger, J. S. (1975). Responses to evaluation as a function of initial self-perceptions. *Psychological Bulletin*, 82(4), 581–596. https://doi.org/10.1037/h0076791
- Sparr, J. L., & Sonnentag, S. (2008). Fairness perceptions of supervisor feedback, LMX, and employee well-being at work. European Journal of Work and Organizational Psychology, 17(2), 198–225. https://doi.org/10.1080/13594320701743590
- Steelman, L. A., & Rutkowski, K. A. (2004). Moderators of employee reactions to negative feedback. *Journal of Managerial Psychology*, 19(1), 6–18. https://doi.org/10.1108/02683940410520637
- Stoker, J. I., Grutterink, H., & Kolk, N. J. (2012). Do transformational CEOs always make the difference? The role of TMT feedback seeking behavior. *The Leadership Quarterly*, 23(3), 582–592. https://doi.org/10.1016/j.leaqua.2011.12.009
- Tarantelli, S. A., Brown, M., Son, J., & Lytle, A. L. (2022). When is supervisory negative feedback most effective? The role of temporal framing. Academy of Management Proceedings, 2022(1), 13700. https://doi.org/10.5465/AMBPP.2022. 13700abstract
- van Dijk, D., & Kluger, A. N. (2011). Task type as a moderator of positive/negative feedback effects on motivation and performance: A regulatory focus perspective. *Journal of Organizational Behavior*, 32(8), 1084–1105. https://doi.org/10.1002/job.725
- Wang, B., Qian, J., Ou, R., Huang, C., Xu, B., & Xia, Y. (2016). Transformational leadership and employees' feedback seeking: The mediating role of trust in leader. *Social Behavior and Personality: An International Journal*, 44(7), 1201–1208. https://doi.org/10.2224/sbp.2016.44.7.1201
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., Tipton, E., Schneider, B., Hulleman, C. S., Hinojosa, C. P., Paunesku, D., Romero, C., Flint, K., Roberts, A., Trott, J., Iachan, R., Buontempo, J., Yang, S. M., Carvalho, C. M., ... Dweck, C. S. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature*, *573*(7774), 364–369. https://doi.org/10.1038/s41586-019-1466-y
- Zyberaj, J. (2024). Not one, two, or three, it takes several supervisory feedback characteristics for effective feedback: A latent profile analysis and experimental vignette. *Cogent Business & Management*, 11(1). https://doi.org/10.1080/23311975.2024.2357366

#### **AUTHOR BIOGRAPHY**

Jetmir Zyberaj is a doctoral researcher at the Work and Organizational Psychology Group, University of Bamberg, and currently works as a Human Resources Expert at Roland Berger in Munich, focusing on performance management. He holds a Master's degree from the Technical University of Munich and had research roles at Stony Brook University in New York and FiBS Research Institute in Berlin and has taught and supervised at the University of Bamberg.

#### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Zyberaj, J. (2025). The effects of supervisory negative feedback and coaching on employees' responses to feedback: The moderating role of mindset. *Human Resource Development Quarterly*, 36(3), 243–262. https://doi.org/10.1002/hrdq.21553