Implications of Negative Career Feedback: Career Distress, Downward Career Goal Revision, and the Role of Growth Mindset

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Abstract

Negative career feedback is a normal part of one's career development. However, individuals vary in their responses to this feedback, and it can have an influence on downwardly revising one's goals. The present study explored the mediating function of career distress on this relationship. Furthermore, it was investigated whether growth mindset negatively moderates the relationship between negative career feedback on progress and career distress and therefore reduces downward career goal revision. Using a cross-sectional design, 182 participants (M_{age} = 23; 62% female) completed an online survey measuring negative career feedback on progress, career distress, growth mindset, and downward career goal revision. A moderated mediation analysis was conducted. Consistent with our hypothesis, negative career feedback on progress was positively related to more downward career goal revision. Career distress partially mediated this relationship. Contrary to our hypothesis, growth mindset neither negatively moderated the relationship between negative career feedback on progress and career distress, nor did it have a conditional indirect effect on downward career goal revision. The outcomes highlight the impact of negative career feedback and the importance of framing feedback correctly.

Keywords: negative career feedback, downward career goal revision, career distress, growth mindset

Implications of Negative Feedback: Career Distress, Downward Career Goal Revision,

and the Role of Growth Mindset

Ilgen and Davis (2001) described negative feedback as the conundrum of feedback. Negative feedback and criticism are necessary to prevent mistakes in the future, but both giving and receiving negative feedback are generally disliked. Research indicates that unfavorable feedback can lead to defensiveness, dissatisfaction, and denial (Ilgen et al., 1981; London, 1997; Podsakoff & Farh, 1989). Moreover, negative feedback may induce anxiety, depression, and distress (Hu et al., 2017b, 2018; Kerpelman et al., 1997), impacting overall well-being and occupational functioning. Especially in the workplace, negative feedback is associated with more counterproductive work behavior and higher turnover intentions (Belschak & den Hartog, 2009). Geddes and Baron (1997) found aggressive reactions in employees after receiving negative feedback from their employer, which was predominantly expressed by verbal, indirect, or passive means. However, the unfavorable and detrimental effects of negative feedback on organization and its members have been contradicted by other scholars where negative feedback positively impacts goal-oriented effort by the recipient (Carver & Scheier, 1998; Higgins, 1987; Kluger & DeNisi, 1996; Locke & Latham, 1990; Miller et al., 1960). Despite the inconsistencies in findings regarding the impact of receiving negative feedback on the recipients' goals and subsequent goal-directed behavior, the focus of the present study is to understand its negative consequences on career goal pursuit. Thus, the present study aims to explore the relationships between negative feedback, career distress and downward career goal revision.

Receiving negative feedback does not automatically lead to experiencing distress. Furthermore, setbacks in the form of negative feedback do not inevitably imply a failure or giving up on one's goals (Babij et al., 2020; Newton et al., 2008). The question remains as to which factors play a role in influencing whether people give up, fail, revise, or engage with

goals. Thus, to address the gap in the literature, growth mindset could explain why people engage, or revise goals. People with a growth mindset who see their abilities as malleable and developable experience reduced negative affect in the face of setbacks (Babij et al., 2020). Negative feedback is experienced as "stress enhancing" and therefore seen as a potential to grow (Crum et al., 2013).

The present study will investigate how the change in growth mindset influences the relationship between negative career feedback and career distress, thereby impacting downward career goal revision through a conditional indirect effect. This remains relevant to research as the possible conditional indirect effect of growth mindset on downward career goal revision has not been investigated so far. Since employers are often hesitant to provide negative feedback due to concerns about employees' reactions and resulting interpersonal repercussions (Geddes & Baron, 1997; Steelman & Rutkowski, 2004), understanding how growth mindset can lessen the impact of such feedback may be advantageous for them.

Negative Career Feedback

Negative career feedback is defined as negative evaluations or comments regarding one's career progress, suitability, or improvements on skills (Kluger & DeNisi, 1996). Negative feelings like career uncertainty, self-doubt, and career distress have been associated with receiving negative career feedback in past research (Creed et al., 2015; Creed et al., 2017; Hu et al., 2018b; Praskova et al., 2015). Moreover, people respond to negative feedback by allocating cognitive, motivational and affective resources to progress or adjust their goals (Lord et al., 2010 as cited in Hu et al., 2018). As evidence, Ilies et al. (2010) found a positive relationship between receiving negative career feedback and a tendency to reduce one's goal strivings to easier standards. As such, negative feedback on career goals may end up dissuading people from following their original goals.

In identity control theory, negative career feedback works as a trigger for perceiving identity discrepancy (Burke, 2016), because the reflected unfavorable information about the self does not align with the individual's identity and aspirations. Consequently, negative career feedback can trigger self-regulation processes like increasing effort or decreasing expectations to realign reflected and desired identity (Burke, 2016; Hu et al., 2017; Kerpelman et al., 1997).

Downward Career Goal Revision

Downward goal revision represents lowering the goal standard to make it more achievable (Caver & Scheier, 1998). In the career domain, downward career goal revision (DCGR) is defined as lowering career aspirations, such as revising one's goal from being a pilot to being a flight attendant (Gottfredson, 2005; Packard & Babineau, 2009). DCGR is a career adaptation outcome of negative career feedback (Hu et al. 2017; Sheppard et al. 2019). According to identity control theory, downward goal revision is triggered by receiving negative career feedback, and it is an essential process to maintain equilibrium with one's reflected and desired identity (Burke, 2016). Receiving negative career feedback would disrupt the balance and create a discrepancy between reflected and desired career self-concept (Burke, 2016; Kerpelman et al., 1997). This discrepancy creates an urgent need to adjust aspirations in order to create balance between the reflected and desired identity (Burke, 2016). DCGR is a process which helps individuals to realign their identities by lowering their goals. Additionally, Hu et al. 2017 identified negative career feedback on improvements needed and not on progress as a positive predictor of DCGR. Therefore, the present study will investigate this relationship. Consequently, we propose the following.

Hypothesis 1: Negative career feedback on progress is positively related to downward career goal revision.

Career Distress

Career distress can be defined as the experience of discomfort related to career decision-making, avoidance of career-related thoughts, or difficulties in setting career goals (Şensoy & Siyez, 2019). Creed et al. (2016) define career distress as an outcome of many negative career related experiences such as career indecision, career compromise, and discovering career barriers. These encounters evoke a spectrum of emotions, including depression, stress, and anxiety (Larson et al., 1994 as cited in Creed et al., 2016). Previous research found these emotions to be positively associated with dysfunctional career thoughts like career indecision (Dieringer et al., 2017; Walker III & Peterson, 2012).

Based on identity control theory, negative career feedback on progress could trigger an identity discrepancy and as a consequence elicit career distress (Anderson & Mounts, 2012; Kerpelman et al., 1997; Sheppard et al., 2019). Creed et al. (2015) found a positive relationship between negative feedback from significant others and career distress, which was partially mediated by goal discrepancy. Since goals are intricately linked to identity, it might be that individuals downwardly revise their goals to bring the reflected and desired identity into balance and reduce the experienced career distress. In line with this, previous research found career distress positively predicting goal revision (Praskova & McPeake, 2022). Therefore, consistent with the framework of identity control theory (Burke, 2016), career distress could explain the relationship between negative career feedback and career distress (Kerpelman et al., 1997; Sheppard et al., 2019). Prior study investigated a serial positive mediation of goal discrepancy and career distress between negative feedback and career exploration, but not for negative career feedback on progress and DCGR (Sheppard et al., 2019). Based on the above we hypothesize that:

Hypothesis 2: Career distress mediates the relationship between negative feedback on progress and downward career goal revision, such that individuals who experience higher

career distress are more likely to downwardly revise their career goals via increased career distress.

Growth mindset

The concept of growth mindset emerged out of Dweck and Leggett's (1988) effort to connect constructs of behavior and motivation. Growth mindset, also known as incremental beliefs, is based on the assumption that skills, strengths, and abilities can be enhanced through effort and determination (Dweck, 2000, 2006). Fixed mindset, on the other hand, is defined by the thought that human attributes are fixed and cannot be developed (Burnette et al., 2013). Both are separate, continuous constructs and therefore measured from low to high, rather than from fixed to growth. Mindsets differ in various situations and contexts. For instance, an individual might possess a professional skills growth mindset but hold a fixed mindset when it comes to working with older adults or handling tasks under time pressure. (Schmitt & Scheibe, 2023). The concept of growth mindset was extended into the realm of the workplace with a construct targeting the perceived malleability of professional skills and abilities (Schmitt & Scheibe, 2023). According to the researchers, a higher growth professional skills and abilities mindset is associated with better career outcomes, such as higher career adaptability, career development, and career engagement.

Individuals with a growth mindset invest more physical and mental effort into seeking goals and show higher perseverance compared to people with a fixed mindset (Dweck & Leggett, 1988). Moreover, people with a growth mindset tend to remain task-focused and are less predisposed to feelings of dissatisfaction when they receive negative feedback (Tabernero & Wood, 1999). Growth mindset not only moderates performance, motivation, and well-being but also regulates how individuals perceive and deal with feedback. Individuals high in growth mindset see negative feedback less as a threat for their identity but more as a learning opportunity, thus making better use of negative feedback and experiencing less distress

(Teunissen & Bok, 2013). Additionally, research indicates that growth mindset serves as a buffer in the face of psychological distress (Burnette, 2020). For instance, Zingoni (2022) discovered that growth mindset negatively moderated the negative influence of the pandemic on career perception, career satisfaction, and career commitment. The negative regulating effect of growth mindset implies that growth mindset might have a conditional indirect effect on DCGR. Therefore, we infer that:

Hypothesis 3: Growth mindset moderates the relationship between negative feedback and career distress, such that higher growth mindset weakens the relationship between negative career feedback and career distress, leading to less downward career goal revision.

Figure 1

Schematic Representation of Moderating Effect of Growth Mindset in the Relationship between Negative Feedback and Career Distress and Mediation of Career Distress between Negative Career Feedback and Downward Career Goal Revision
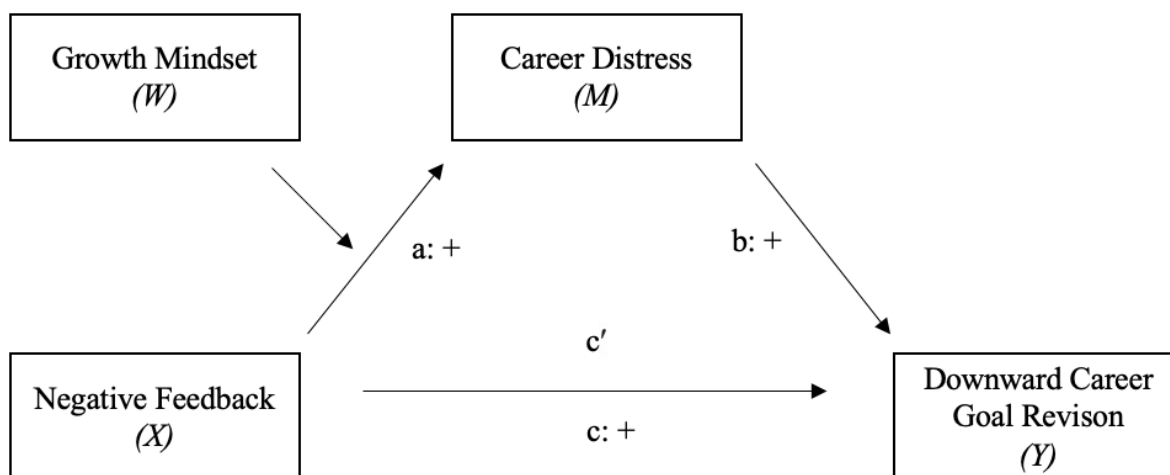
Method

Sample

An online survey was conducted using a sample of participants ($N = 182$) recruited via social networks and online platforms, given the necessity for convenience sampling. The aim to achieve a sample size between 170 and 200 participants was fulfilled. The target population

was aimed to consist of participants who either had the status of a university student or an employee ranging from the age of 18 to 35 years. This criterion was set to ensure that the participants included in the sample were in the process of finding their career paths at the time of completing the survey, as opposed to having already committed to a specific career. We excluded three participants from our final sample because they did not meet the age criterion to be eligible for this study. From the raw dataset, 137 participants were removed due to missing data and incompletion. Six persons did not consent to participate and were therefore removed. One person was subsequently excluded because they neither studied nor worked.

The final sample was relatively young with an average age of $M = 23.52$ years ($SD = 3.01$). 62.1% of the sample were female, 36.8% were male, and 1.1% indicated 'Non-binary'. The majority of 63.7% of participants were enrolled in a university program at the time of completion, while 29.1% indicated to be employed in different work sectors. Only a small minority of 3.3% studied while also being employed. The majority of the sample (53.3%) had a Dutch background, while 14.8% were from Germany, 14.3% from Finland and 17% specified other countries of origin.

Feedback on Career Goals (FCG) Inventory

In order to assess negative feedback towards career goals, our independent variable, we used the Feedback on Career Goals inventory by Hu et al. (2017b). The original material is made of three subscales, containing 24 items. For the current study, we only made use of two of these three subscales, namely feedback on current career progress (e.g., "People tell me that I am not working hard enough to get into/improve/maintain my chosen career"), and feedback on goal suitability (e.g., "I am told that my preferred career choice will not let me display my real talents"), containing eight items each. Response options follow a 6-point Likert scale ranging from "Strongly disagree" to "Strongly agree". The higher the scores on the scale, the stronger the intensity of negative feedback experienced by the participants. The

inventory shows good internal reliability with a Cronbach's α of .77 and .83 respectively on the two subscales used for this survey. Cronbach's α for our sample was .88 for feedback on career progress and .81 for feedback on goal suitability.

9-item Career Distress Scale

To assess career distress, our mediator, we used the 9-item Career Distress Scale by Creed et al. (2016). We excluded the following three items: "I often feel that my life lacks much purpose.", "I don't have the special talents to follow my first career choice.", "An influential person doesn't approve of my career choice, which is hindering me from seeking that career.". We did so since we believed that they would influence other items in our questionnaire. Moreover, we expanded the measurement to include career continuation in addition to assessing distress related to career selection in the items. The six items (e.g., "I often feel down or depressed about selecting or continuing my career") were rated using a 6-point Likert scale ("Strongly disagree" to "Strongly agree"). The higher the score, the higher the career distress experienced by participants. With a Cronbach's α of .90, the scale indicates a strong internal reliability. Cronbach's α for our sample was .84.

Professional Skills and Abilities Mindset Scale

To assess participants' level of growth mindset, our moderator, we used the Professional Skills and Abilities Mindset Scale by Schmitt and Scheibe (2023), where only the three items pertaining to growth mindset were analyzed while the others remained included as distractor items. The growth mindset subscale contains 3 items (e.g., "People can always substantially improve their professional skills and abilities"). The items are rated on a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree". With a Cronbach's α of .83, the scale shows good internal consistency. Cronbach's α for our sample was .66.

Downward Career Goal Revision

For our dependent variable, this study employs the 6-item scale generated by Hu et al. (2017) to assess our participants' tendencies to downward-revise their career goals in response to receiving negative feedback. A sample item was "I need to reduce my aspirations as the occupation I am aiming for is unrealistic". Response options followed a 6-point Likert scale, ranging from "strongly disagree" to "strongly agree". Higher scores imply a stronger tendency for downward career goal revision. With a Cronbach's α of .91, the scale shows a strong internal consistency. Cronbach's α for our sample was .94.

Procedure

This project is part of a three-wave, longitudinal study with two weeks between the first and second wave, and one month between the second and third wave. Our study focused only on the first wave. Participants were recruited through convenience sampling and completed a survey in English, using the online program Qualtrics. Participants were sent the link to the survey, which they had a week to complete. In this survey, participants received information on the purpose of the study, what they would be doing, reasons for participation, how their data would be treated, and points of contact for any further information. Participants also signed a consent form before starting the survey, where they acknowledged their right to withdraw from the study at any point and that their participation was voluntary.

After signing the consent form, participants provided some demographic information, such as employment status, age, gender, work sector, and country of residence. Participants then answered questionnaires on the measures described above. The survey also included other questionnaires on other measures, although they are beyond the scope of this paper. This survey took around 15 minutes to complete. There was no monetary incentive for completion of this survey. The research procedure was approved by the Ethical Committee of Psychology at the University of Groningen.

Statistical Analysis

Using SPSS, a preliminary analysis was run to investigate the quality of the data which included correlations and descriptive statistics. Additionally, we checked whether the data is fit for the analysis by looking at, scale reliabilities, data trends, and assumptions of linear regression. With this, we checked for significant relationships that can allow us to investigate our regression model. Our statistical analysis also included several linear regression analyses. Moreover, we used PROCESS Macro by Hayes (2013), an extension of SPSS, in order to investigate the moderated mediation path.

Results

Preliminary Analysis

First, we analyzed the means, standard deviations, and correlations of the main variables (see Table 1), along with the assumptions of a multiple regression (see Figure 1 and Figure 2). Particularly noteworthy is the high mean of growth mindset ($M = 4.14$, $SD = .64$) and the low mean of negative feedback on goal progress ($M = 2.37$, $SD = .86$) and downward career goal revision ($M = 2.03$, $SD = .84$). The correlation matrix shows that there is a positive relationship between negative career feedback on progress and career distress ($r = .54$, $p < .001$), negative feedback on progress and downward career goal revision ($r = .28$, $p < .001$), and career distress and downward career goal revision ($r = .33$, $p < .001$). Thus, a correlation was found between negative career feedback on progress, career distress, and downward career goal revision.

Table 1

Descriptive Statistics and Correlation Matrix

Variables	*M*	*SD*	1	2	3	4
Downward Goal Revision	2.03	.84	1			
Negative Career Feedback	2.37	.86	.31*	1		
Career Distress	3.03	1.07	.34*	.56*	1	

Growth Mindset	4.14	.64	-.11	.02	-.098	1
Age	23.52	3.02	.05	-.08	-.23*	-.01
Gender			-.15*	-.04	.15*	.03

Note. This table shows the means, standard deviations, and correlations of all the examined variables for the preliminary analysis (N = 182). Downward Goal Revision = Downward Career Goal Revision, Negative Career Feedback = Negative Career Feedback on Progress. * signals that correlation is significant at the 0.01 level (two-tailed).

Testing the assumptions for multiple regression assumptions included evaluations of normality of residuals, homoscedasticity of residuals, and linearity between independent and dependent variable (see Appendix A). The majority of the data points follow closely the reference line, which indicates that the normality assumption is met (see Figure 2). Furthermore, the residual plot shows a random distribution of data points, but two parallel lines with a negative trend are noticeable (see Figure 3). Nevertheless, the assumptions are sufficiently met to proceed with the analysis.

Hypothesis Testing

Hypothesis 1

Based on the first hypothesis, it was assumed that the predictor negative career feedback on progress has a positive relationship with the dependent variable downward career goal revision. The correlation shows a weak positive relationship ($r = .31$, p = < .001). The main effect shows a significant relationship (B = .30, $p = < .001$, *95% CI* [.17, .44]), explaining 9% of the variance in DCGR ($R^2 = .09$, $F(1, 180) = 19.15$, $p < .001$). Therefore, the data supports the first hypothesis.

Furthermore, we investigated whether the interaction of negative career feedback and age as well as negative feedback and gender has an effect on the dependent variable. The predictors explained 13% of the dependent variable ($R^2 = .13$, $F(3, 178) = 9.05$, $p < .001$). The interaction with age was not significant (B = .01, $p = .26$, *95% CI* [-.01, .03]), however the

interaction with gender had a significant effect on the dependent variable (B = -.12, p = .01, *95% CI* [-.21, -.03]). The presence of the interaction effect made the main effect insignificant (B = .27, p = .19, *95% CI* [-.13, .67]).

Hypothesis 2

The second hypothesis introduces career distress as a mediator between negative career feedback on progress and downward career goal revision. The model, tested through PROCESS Macro Model 4 (Hayes, 2013) accounted for 13% of the variance in downward career goal revision (R^2 = .13, $F(2, 179)$ = 14.14, $p < .001$), indicating a weak model fit. It was found that negative career feedback on progress significantly predicts higher levels of career distress (B = .69, p = <.001, *95% CI* [.54, .84]). Negative career feedback predicted 31% of the variance on career distress (R^2 = .31, $F(1, 180)$ = 81.37, $p < .001$). Furthermore, career distress positively influences downward career goal revision (B= .19, p = .001, *95% CI* [.06, .32]). The direct effect of negative career feedback on progress on downward career goal revision also remained significant (B = .17, p = .04, *95% CI* [.01, .33]), which indicates a partial mediation of career distress on the relationship between negative career feedback on progress and downward career goal revision. Therefore, the data partially supports the second hypothesis.

Hypothesis 3

The third hypothesis investigates the possible conditional indirect effect of growth mindset. It was assumed that growth mindset moderates the relationship between negative career feedback on progress and career distress and has a buffering effect. The predictors explain 32% of the unexplained variance in the moderation (R^2 = .32, $F(3, 178)$ = 28.31, $p <$ .001). Negative career feedback was significantly related to career distress (B = .69, p = < .001, *95% CI* [.54, .85]). Growth mindset, as well as the interaction between negative career feedback and growth mindset had no significant effect on career distress (B = -.18, p = .08,

95% CI [-.39, .02]; B = -.01, *p = .92, 95% CI* [-.25, .23]). Negative career feedback, as well as career distress were significantly associated with DCGR (B = .17, *p* = .04, *95% CI* [.01, .33]; B = .19, *p* = .001, *95% CI* [.06, .32]). The conditional indirect effect did not yield significant results with an index of moderated mediation of -.002 (*CI* [-.05, .04]) (see Figure 3). Thus, the data does not support the third hypothesis.

Discussion

The present study examined the mediation of career distress between negative career feedback and DCGR, and how a growth mindset affects the impact of career distress on the relationship between negative career feedback and DCGR. The first hypothesis was confirmed, the second hypothesis was partially confirmed, and lastly the third hypothesis was not supported.

Theoretical Implications

Firstly, the results identified a significant relationship between negative career feedback and DCGR. As a consequence, increased negative career feedback is associated with greater levels of DCGR. The findings are congruent with the identity control theory, which states that negative career feedback can trigger a discrepancy between an individual's reflected and desired identity (Burke, 2016). As goal choice and identity formation are highly linked, such that they have reciprocal influence on each other (Duriez et al., 2011), individuals are therefore more likely to downwardly revise goals to restore balance between their actual state of goal progress and their desired goal.

However, research shows mixed findings regarding the relationship between negative career feedback and DCGR. Hu et al. (2018) found a positive relationship between feedback on suitability as well as feedback on improvements needed and goal shifting. Contrary to their expectations, they found a negative relationship between feedback on goal progress and goal shifting, which could be due to statistical suppression. It is noteworthy that goal shifting

differs in the direction individuals change their goals from DCGR. Whereas goal shifting allows for adjustments in goals upwards, downwards, or maintaining the same level, DCGR specifically entails lowering one's career aspirations. According to identity control theory, individuals are more inclined to lower their goals rather than maintain them at the same level or raise them when faced with negative career feedback (Kerpelman et al., 1997). This adjustment aims to reduce goal discrepancy and enhance attainability (Kerpelman et al., 1997). Based on these findings, DCGR may be a more favorable construct than goal shifting in the context of receiving negative career feedback on progress within the framework of identity control theory.

The second hypothesis examined the potential role of career distress as a mediator between negative career feedback on progress and downward revision of career goals. The data provided evidence that career distress partially mediates the relationship between negative career feedback and DCGR. The results of the present study align with previous research that found positive relationships between negative career feedback on progress and career distress (Creed et al., 2015), as well as relationships between career distress and DCGR (Hu et al., 2018b). Nevertheless, the findings regarding the mediation of negative career feedback on progress and DCGR through career distress are mixed (Hu et al., 2017; Ilies & Judge, 2005). While Hu et al.'s (2017) longitudinal research did not find a mediation of career distress between negative career feedback on progress and DCGR, Ilies and Judge (2005) found that affective reactions explain the relationship between feedback and DCGR. The findings of Ilies and Judge (2005) as well as the findings of the present paper align with identity control theory. Supposedly, receiving negative feedback triggers a discrepancy between the desired and actual identity, which causes distress. In order to alleviate the perceived distress, it is likely that individuals revise their goals to make them more achievable (Burke, 2016; Kerpelman et al., 1997).

The third hypothesis investigated whether growth mindset negatively moderates the relationship between negative career feedback and career distress and therefore reduces DCGR. In other words, we expected growth mindset to buffer the appearance of career distress (Burnette, 2020) in situations where negative career feedback is high, and to be related with lower rates of DCGR. The results of the present study do not provide evidence to support the hypothesis and diverge from prior findings. Previous research found evidence that a higher growth mindset lowered perceived psychological distress (Burnette et al., 2020; Schroder et al., 2017). Furthermore, Dweck and Leggett (1988) investigated the interaction of mastery-oriented mindset, negative affect and goal setting. Research has shown that mastery-oriented people experience less negative affect by integrating negative feedback as something valuable, and setting themselves more challenging goals. Higher growth mindset had therefore a positive effect on effective goal orientation. Hence, non-significant findings of the moderation effect might be better explained by a mediated moderation rather than the investigated moderated mediation model. It might be possible that a growth mindset moderates the relationship between career distress and DCGR instead of career distress and negative career feedback. Previous research already showed that growth mindset buffers the effect of psychological distress and that people with a growth mindset are less likely to revise their goals after receiving negative feedback (Burnette et al., 2013; Dweck & Leggett, 1988; Yeager & Dweck, 2012). Future research could investigate whether a growth mindset also moderates the relationship between career distress and DCGR. (Burnette, 2020; Dweck & Leggett, 1988; Teunissen & Bok, 2013).

Strengths and Limitations

Several limitations should be noted when interpreting the findings. Firstly, the cross-sectional design limits not only the possibility to extend the mediation effect, but also the ability to generalize findings over a longer period of time. Secondly, our sample consisted of

relatively highly educated individuals. Higher education is associated with greater career ambitions (Judge & Kammeyer-Mueller, 2012). It is possible that negative feedback on career progress affects lower-educated individuals more than it does those with higher education. Thirdly, the current study did not measure perceived identity discrepancy, which is crucial for identity control theory (Burke, 2016). Consequently, it did not address whether perceiving an identity discrepancy may lead to career distress, as suggested by identity control theory. On the other hand, the study entails strong methodological components like good reliability, validity and a significant sample size. Therefore, the study has a solid foundation for making meaningful interpretations and implications.

Future Research

Since the present study is cross-sectional, it would be valuable to investigate the changes of the variables over time in a longitudinal study or to possibly confirm the mediation effect in a cross-lagged study design. This approach would allow for an examination of the stability of the main and mediation effect and possibly detect long-term changes in the relationships.

Another advantage of the cross-lagged design would be the possibility to investigate a serial mediation of goal discrepancy and career distress mediating the relationship between negative career feedback or DCGR. Since Sheppard et al. (2019) found goal discrepancy and career distress in a serial mediation explaining negative career feedback and career exploration, future research could investigate if this holds for DCGR as well.

Furthermore, future studies should strive for greater diversity in their samples, particularly regarding educational backgrounds. Therefore, including participants from diverse educational backgrounds could improve generalizability and provide a broader understanding of how career goals are revised in response to negative career feedback across various educational levels.

Practical Implications

Since negative career feedback has an effect on DCGR, it is essential for practitioners to understand the potential impact of negative feedback. According to Ilgen and Davis (2000), engagement or revision of a goal depends on how negative feedback is framed. Negative feedback should be delivered in a way that it motivates people to acknowledge the feedback while maintaining their self-concept and confidence. Furthermore, career counselors should guide young people in examining the feedback they receive and reflecting on how they interpret it, particularly if they may be overinterpreting negative feedback. This support will help young adults manage feedback more effectively and assess the attainability of their current goals. As a consequence, individuals will be able to develop appropriate strategies in response to unfavorable feedback, rather than simply revising their goals to make them more achievable. Furthermore, with career distress partially mediating the relationship between negative career feedback and DCGR, career counselors might find it beneficial to incorporate emotion regulation techniques to address career-related stress. Mindfulness interventions were negatively associated with emotional exhaustion (Hülsheger et al., 2012). Thus, future research should investigate whether mindfulness interventions are also effective in dealing with career distress.

Conclusion

The study aimed to explore the relationships between negative career feedback, DCGR, career distress and growth mindset. The findings demonstrate that career distress partially mediated the relationship between negative career feedback and DCGR. Growth mindset was not found to be either moderating negative career feedback and career distress, nor did it have a conditional indirect effect on DCGR. Targeting framing of negative feedback and possibly implementing mindfulness interventions to reduce career distress might be beneficial to reduce DCGR. Future research could investigate the role of perceived goal

discrepancy, as well as investigating the relationships between the studied variables in a

longitudinal design.

References

Anderson, K. L., & Mounts, N. S. (2012). Searching for the self: an identity control theory approach to triggers of occupational exploration. *The Journal of genetic psychology, 173*(1), 90–111. https://doi.org/10.1080/00221325.2011.573027

Babij, A.D., Burnette, J.L. & Hoyt, C.L. (2020). Failing and feeling bad: how we think about experiencing negative emotions during setbacks. *Motiv Emot, 44*, 436–452. https://doi.org/10.1007/s11031-019-09789-3

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*, 274-303. https://doi.org/10.1111/j.1464-0597.2008.00336.x

Burke, P.J. (2016). Identity Control Theory. *Blackwell Encyclopedia of Sociology*, G. Ritzer (Ed.). https://doi.org/10.1002/9781405165518.wbeosi002.pub2

Burnette, J. L., Knouse, L. E., Vavra, D. T., O'Boyle, E., & Brooks, M. A. (2020). Growth mindsets and psychological distress: A meta-analysis. *Clinical Psychology Review, 77*, https://doi.org/10.1016/j.cpr.2020.101816.

Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: a meta-analytic review of implicit theories and self-regulation. *Psychological bulletin, 139*(3), 655–701. https://doi.org/10.1037/a0029531

Carver, C. S., & Scheier, M. F. (1998). *On the Self-regulation of Behavior*. New York: Cambridge University Press.

Creed, P. A., Hood, M., & Hu, S. (2017). Personal orientation as an antecedent to career stress and employability confidence. *Journal of Vocational Behavior, 99*, 79–92. doi:10.1016/j.jvb.2016.12.007

Creed, P. A., Hood, M., Praskova, A., & Makransky, G. (2016). The Career Distress Scale: Using Rasch Measurement Theory to Evaluate a Brief Measure of Career Distress. *Journal of Career Assessment, 24*(4), 732-746. https://doi.org/10.1177/1069072715616126

Creed, P. A., Wamelink, T., & Hu, S. (2015). Antecedents and consequences to perceived career goal–progress discrepancies. *Journal of Vocational Behavior, 87*, 43–53. doi:10.1016/j.jvb.2014.12.001

Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: the role of mindsets in determining the stress response. *Journal of personality and social psychology*, *104*(4), 716–733. https://doi.org/10.1037/a0031201

Dieringer, D. D., Lenz, J. G., Hayden, S. C., & Peterson, G. W. (2017). The relation of negative career thoughts to depression and hopelessness. *The Career Development Quarterly, 65*(2), 159-172. https://doi.org/10.1002/cdq.12089

Duriez, B., Luyckx, K., Soenens, B., Berzonsky, M. (2011). A Process-Content Approach to Adolescent Identity Formation: Examining Longitudinal Associations Between Identity Styles and Goal Pursuits. *Journal of personality, 80*(1), 135-161. https://doi.org/10.1111/j.1467-6494.2011.00729.x

Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development.* Psychology Press.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. Ballantine.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*(2), 256–273.

Geddes, D., & Baron, R. A. (1997). Workplace Aggression as a Consequence of Negative Performance Feedback. *Management Communication Quarterly*, *10*(4), 433-454. https://doi.org/10.1177/0893318997104002

Gottfredson, L. S. (2005). Applying Gottfredson's theory of circumscription and compromise in career guidance and counseling. *Career development and counseling: Putting theory and research to work, 1,* 71-100.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Press.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.

Hu, S., Creed, P. A., & Hood, M. (2017). Career goal revision in response to negative feedback: Testing a longitudinal cross-lagged model. *Journal of Counseling Psychology, 64*(3), 335–345. https://doi.org/10.1037/cou0000193

Hu, S., Creed, P. A., & Hood, M. (2017b). Development and initial validation of a measure to assess career goal feedback. *Journal of Psychoeducational Assessment, 35*(7), 657–669. https://doi.org/10.1177/0734282916654645

Hu S., Hood M., Creed P. A. (2018). Negative career feedback and career outcomes: The mediating roles of self-regulatory processes. *Journal of Vocational Behavior, 106*, 180–191. https://doi.org/10.1016/j.jvb.2018.02.002

Hu, S., Hood, M., & Creed, P. A. (2018b). Career goal importance as a moderator in the relationship between career feedback and career-related stress. *Journal of Career Development, 45*, 3–18. doi:10.1177/0894845316667847

Hülsheger, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work : the role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, *98*(2), 310-325. https://doi.org/10.1037/a0031313

Ilgen, D. R., & Davis, C. A. (2000). Bearing bad news: Reactions to negative performance feedback. *Applied Psychology: An International Review*, *49*(3), 550–565. https://doi.org/10.1111/1464-0597.00031

Ilgen, D.R., Mitchell, T.R. and Fredrickson, J.W. (1981). Poor performers: supervisors' and subordinates' responses. *Organizational Behavior and Human Performance*, *27*, 386-410.

Ilies, R., & Judge, T. A. (2005). Goal Regulation Across Time: The Effects of Feedback and Affect. *Journal of Applied Psychology, 90*(3), 453–467. https://doi.org/10.1037/0021-9010.90.3.453

Ilies, R., Judge, T.A., & Wagner, D.T. (2010). The influence of cognitive and affective reactions to feedback on subsequent goals. *European Psychologist*, 15, 121-131. https://doi.org/10.1027/1016-9040/a000011

Judge, T. A., & Kammeyer-Mueller, J. D. (2012). On the value of aiming high: The causes and consequences of ambition. *Journal of Applied Psychology, 97*(4), 758–775. https://doi.org/10.1037/a0028084

Kerpelman, J. L., Pittman, J. F., & Lamke, L. K. (1997). Toward a Microprocess Perspective on Adolescent Identity Development: An Identity Control Theory Approach. *Journal of Adolescent Research, 12*(3), 325-346. https://doi.org/10.1177/0743554897123002

Kluger, A. N., & DeNisi, A. (1996). The Effects of feedback intervention on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*, 254–284.

Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting & Task Performance*. Upper Saddle River, NJ: Prentice Hall.

London, M. (1997), *Job Feedback: Giving, Seeking, and Using Feedback for Performance Improvement*, Lawrence Erlbaum, Mahwah, NJ.

Miller, G. A., Galanter, E., & Pribram, K. H. (1960). *Plans and the Structure of Behavior.* New York: Henry Holt.

Newton, N. A., Khanna, C., & Thompson, J. (2008). Workplace failure: Mastering the last taboo. *Consulting Psychology Journal: Practice and Research, 60*(3), 227–245. https://doi.org/10.1037/1065-9293.60.3.227

Packard, B. W. L., & Babineau, M. E. (2009). From drafter to engineer, doctor to nurse: An examination of career compromise as renegotiated by working-class adults over time. *Journal of Career Development, 35*(3), 207-227.

Podsakoff, P.M. and Farh, J.L. (1989), "Effects of feedback sight and credibility on goal setting and task performance", *Organizational Behavior and Human Decision Processes*, *44*, pp. 45-67.

Praskova, A., Creed, P. A., & Hood, M. (2015). Career identity and the complex mediating relationships between career preparatory actions and career progress markers. *Journal of Vocational Behavior, 87,* 145–153. https://doi.org/10.1016/j.jvb.2015.01.001

Praskova, A., & McPeake, L. (2022). Career Goal Discrepancy, Career Distress, and Goal Adjustment: Testing a Dual Moderated Process Model in Young Adults. *Journal of Career Assessment, 30*(4), 615-634. https://doi.org/10.1177/10690727211063372

Rice, K. G., Richardson, C. M. E., & Tueller, S. (2014). The short form of the revised almost perfect scale. *Journal of Personality Assessment, 96*(3), 368–379. https://doi-org.proxy-ub.rug.nl/10.1080/00223891.2013.838172

Şensoy, G., & Siyez, D. M. (2019). The career distress scale: structure, concurrent and discriminant validity, and internal reliability in a Turkish sample. *International Journal for Educational and Vocational Guidance, 19*, 203-216.

Schmitt, A., & Scheibe, S. (2023). Beliefs About the Malleability of Professional Skills and Abilities: Development and Validation of a Scale. *Journal of Career Assessment, 31*(3), 493–515. https://doi-org.proxy-ub.rug.nl/10.1177/10690727221120367

Schroder, H. S., Fisher, M. E., Lin, Y., Lo, S. L., Danovitch, J. H., & Moser, J. S. (2017). Neural evidence for enhanced attention to mistakes among school-aged children with a growth mindset. *Developmental cognitive neuroscience, 24*, 42–50. https://doi.org/10.1016/j.dcn.2017.01.004

Sheppard, S., Hood, M., & Creed, P. A. (2019). An Identity Control Theory Approach to Managing Career Identity in Emerging Adults. *Emerging Adulthood, 8*(5), 361-366. https://doi.org/10.1177/2167696819830484

Steelman, L. A., & Rutkowski, K. A. (2004). Moderators of employee reactions to negative feedback. *Journal of Managerial Psychology, 19*(1), 618. https://doi.org/10.1108/02683940410520637

Tabernero, C., & Wood, R. E. (1999). Implicit Theories versus the Social Construal of Ability in Self-Regulation and Performance on a Complex Task. *Organizational behavior and human decision processes, 78*(2), 104–127. https://doi.org/10.1006/obhd.1999.2829

Teunissen, P. W., & Bok, H. G. J. (2013). Believing is seeing: How people's beliefs influence goals, emotions and behaviour. *Medical Education*, *47*, 1064–1072.

Walker III, J.V., & Peterson, G. W. (2012). Career thoughts, indecision, and depression: Implications for mental health assessment in careeer counseling. *Journal of Career Assessment, 20*(4), 497-506. https://doi.org/10.1177/1069072712450010

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational psychologist, 47*(4), 302-314.

Zingoni, M. (2022). A Matter of Mindset: The Benefit of a Growth Mindset After a Career Shock. *European Journal of Studies in Management & Business, 23*.

Appendix A

Figure 2
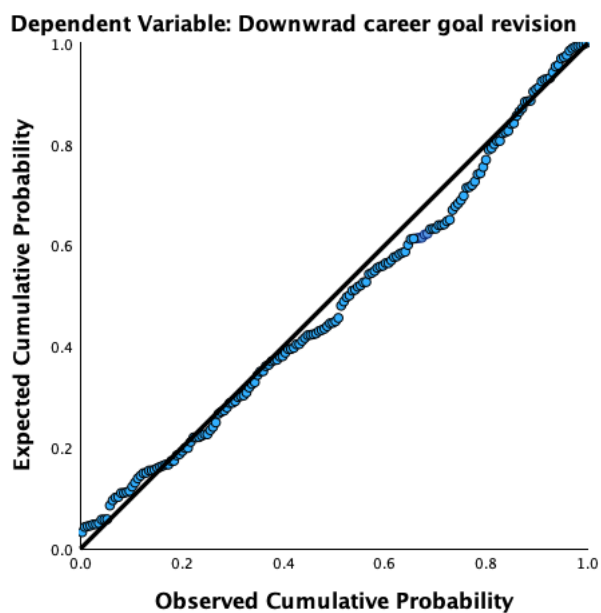
Q-Q plot to investigate normality

Figure 3

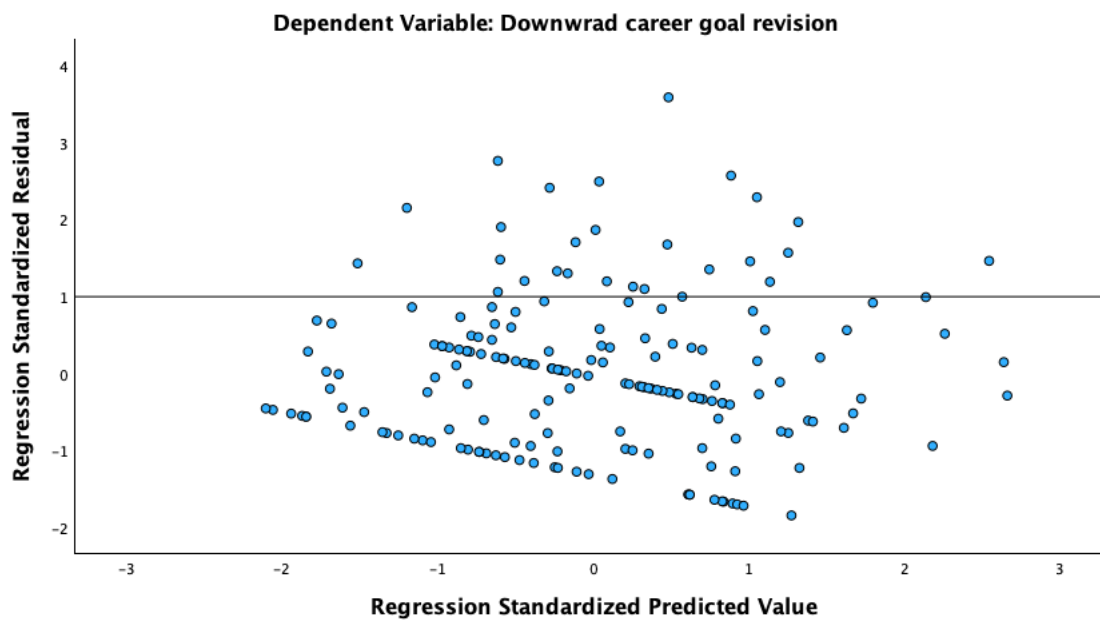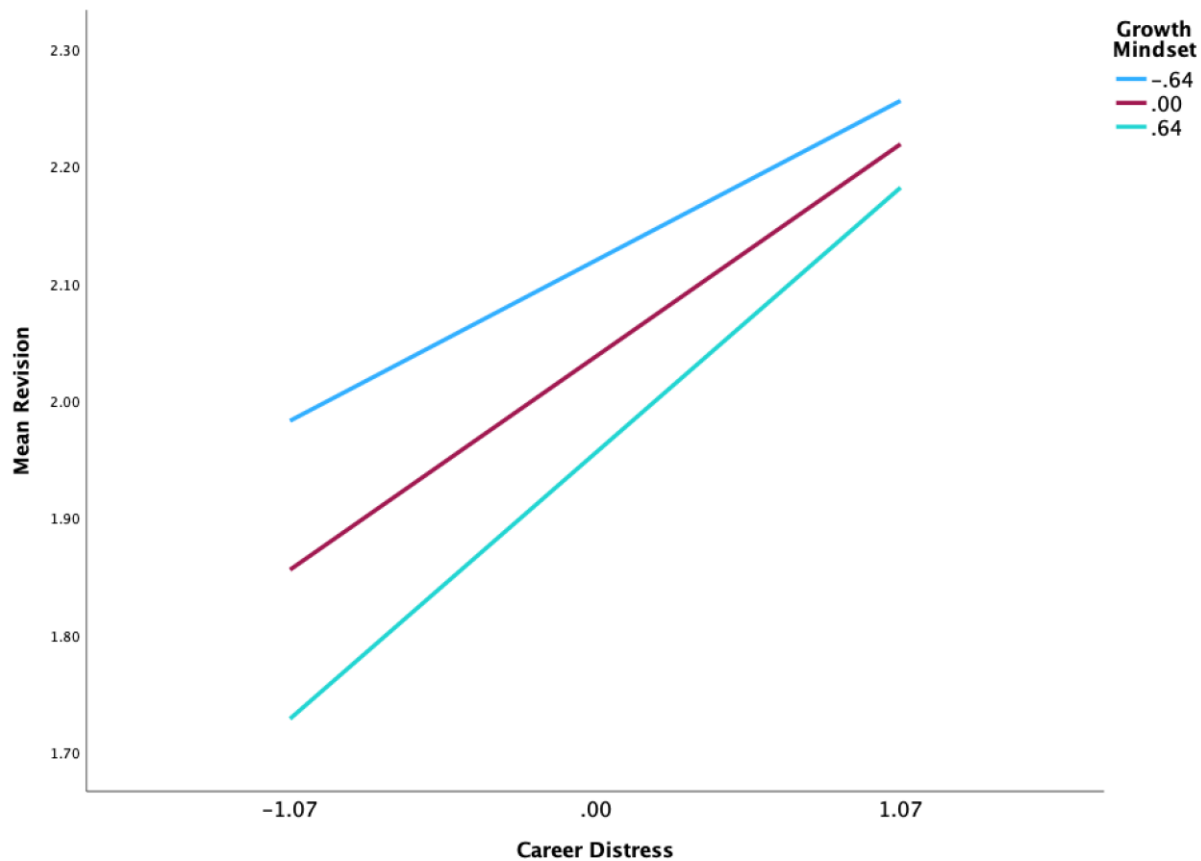*Residuals plot to investigate linearity and homoscedasticity*

Figure 4

Interaction between Career Distress and Growth Mindset on Mean Downward Career Goal

Revision

Note. This figure illustrates the relationship between career distress and mean downward career goal revision scores at three different levels of growth mindset: -0.64, 0.00, and 0.64 (-1 SD, 0, +1 SD).