

Effects of Negative Career Feedback on Career Goal Revision through Career Self-efficacy

Bastiaan Verkerk

S4765435

Department of Psychology, University of Groningen

Bachelor Thesis (1b-2a 23/24) – PSB3E-BT15.2023-2024.2

Supervisor: T.I. Heihal

April 21, 2024

Abstract

The socio-cognitive model of career self-management by Lent & Brown (2013) provides a framework for understanding mechanisms of self-regulation in career setting. Negative feedback may be seen as a learning experience, which influences career actions, such as career goal revision, through the intermediary process of career self-efficacy. The goals of our study were to replicate findings by Hu et al. (2019) of a moderate positive relationship between negative feedback on career goal suitability and downward career goal revision, as well as the indirect relationship through career self-efficacy. We also explored professional skills and abilities mindset having a conditional indirect effect to test its buffering potential. This was researched through a cross-sectional survey design with a convenience sample (N=108). Results showed a moderate-to-strong positive relationship between negative career feedback and downward career goal revision, as well as career self-efficacy serving as moderate partial mediator. Growth professional skills and abilities mindset was not found to have a conditional indirect effect. These findings highlight the negative effects negative feedback may have on career goal striving, and the importance of protecting career self-efficacy beliefs when providing negative career feedback.

Keywords: negative career feedback, negative feedback, career self-efficacy, professional skills and abilities growth mindset, career goal revision

Effects of Negative Feedback and Mindset on Career Goal Revision Through Self-Efficacy

Throughout their career, employees frequently encounter numerous challenges and receive feedback on the way they handle them. People may react in different ways to this feedback. They may make compromises in their goals in the form of relinquishing their most desired goals for more easily accessible alternatives (Gottfredson, 2005). This may take the form of downwardly revising their goal or disengaging from their goal (Worsch et al., 2003). It is argued they partake in this alternative seeking to minimize psychological distress that comes with unattainable goals (Carver & Scheier, 1999). Thus, people are more likely to adjust their career goals downward, then to incorporate negative feedback to fit their current goal, potentially due to this route requiring less psychological effort. According to the Lent & Brown (2013) socio-cognitive career self-management model, negative feedback can be seen as a learning experience with drives career goals and actions. In their meta-analytic study, Kluger & DeNisi (1996) have found effects of (negative) feedback in relation to self-regulation to be inconsistent. They argue effects of feedback may be moderately positive to moderately negative, depending on type of feedback, what the feedback is aimed at (person or task) and person variables. Thus, it may be important also to look at potential moderators and mediators that fit these descriptions to discover more about the mechanisms that shape the relationship between negative feedback and employees' adaption to it. Self-efficacy beliefs may be considered a person-variable and have been found to be moderately related to career decision making in a meta-analytic review (Choi et al., 2012). In support of self-efficacy playing an important role in career self-management, self-efficacy beliefs are an integral part in the Lent & Brown (2013) socio-cognitive career self-management model, in which it serves a mediating role. Another potentially relevant person variable may be of importance of how employees follow or achieve their career goals. Namely,

differences in professional skills and abilities mindsets between employees (Schmitt & Scheibe, 2023). Burnette (2013) poses more generally that mindsets, meaning people's conceptualization of ability as fixed or malleable, can be an important factor in self-regulation.

There are several inconsistencies on the effects of feedback and subsequent action to negative feedback. Thus, based on previous findings by Hu et al. (2019), the present model seeks to clarify and understand the consequences of negative career feedback, by replicating the relationship between negative feedback and downward career goal revision, through career self-efficacy, in context of the Lent & Brown (2013) socio-cognitive model of Career Self-management. Specifically, our focus lies on negative feedback on career goal suitability, since it was found to be associated the strongest to downward career goal revision, compared to negative feedback on goal progress (Hu et al., 2019). Beyond this, we also would like to explore professional skills and abilities mindset as addition, based on findings by Burnette (2013) of mindsets playing a role. This way, we shed light on individual differences in how people may respond to negative feedback. Understanding the associations between these constructs can offer insight into how individuals manage their career trajectories and goals based on negative feedback, while also shedding light on possible interaction of professional skills and abilities mindset and self-efficacy beliefs.

Negative Feedback on Career

In Lent & Brown's (2013) socio-cognitive career self-management model, negative feedback can be considered a learning experience, and may lead to cognitive and emotional changes in people's career related goals and actions. Negative feedback becomes relevant in childhood as a learning experience and remains so in people's careers. In this way, it shapes choices people make in their lives. It can have positive effects for employees, by allowing

increased performance on tasks (Locke & Latham, 2002). Kluger & DeNisi (1996) found effects that providing negative feedback makes rejection more likely over other types of feedback such as positive feedback in a meta-analysis. Rejection would lead to demotivating, negative effects. However, they also say it may provide the means to learn tasks and facilitate people's pursuance of their goals. Similarly to their findings, Lazarus (1991) has found that negative feedback may result in negative affect, and based on research by Belschack & Den Hartog (2008), decreased organizational commitment. Further, receiving negative feedback is associated with lower self-efficacy beliefs and motivation (Fontayne et al., 2018). Negative feedback seems related to less career goal engagement and more career disengagement (Wrosch et al., 2003; Fontayne et al., 2018; Hu et al., 2017), as well as to more downward career goal revision, as mentioned by (Hu, Creed & Hood, 2019; Gottfredson, 2005). What type of negative feedback is provided may be important for effects feedback may have (Kluger and DeNisi, 1996). Hu et al. (2017) found that the type of negative feedback is associated with the type of career goal related action people partake in. They distinguished three types: The first is negative feedback on career goal suitability, which is an indication of a misalignment between a person's interests, talent and values and their career. The second is negative feedback on career progress, which entails unattainability of a career goal due to a lack of skills, abilities or effort. The last is negative feedback on career improvement needed, which focuses on availability of instructions of how to improve. Negative feedback on career progress and negative feedback on career goal suitability were both linked to higher career goal disengagement and downward career goal revision (Hu et al. 2019), however, this effect was stronger for negative feedback on career suitability, compared to negative feedback on career progress. Based on this body of research, consequences of negative feedback in career setting can be rather broad. It may help employees grow and

develop, or it may stagger them in their goal pursuit. Thus, the present project aims to clarify outcomes of negative feedback in one's pursuance of career goals, since negative feedback can frequently be encountered in career settings.

Downward Career Goal Revision after Receiving Negative Feedback

Downward goal revision refers to the act of establishing and striving for a career objective that is less esteemed or less challenging in nature (Creed & Hood, 2014; Hu, Creed & Hood, 2018). Young individuals may adjust career goals toward lower striving upon encountering negative career feedback (Wrosch et al., 2003; Gottfredson, 2005), potentially to alleviate psychological distress associated with unattainable career goals (Carver & Scheier, 1999). Specifically, negative feedback on career progress and suitability have been linked to moderately predict higher levels of downward career goal revision (Hu et. al, 2019), though this predictive value was bigger for negative feedback on career suitability. Furthermore, Hu, Creed & Hood (2017) also found negative feedback on improvement to weakly predict more downward goal revision. This fits in The Social Cognitive Model of Career Self-management by Lent and Brown (2013): Negative feedback can be seen as a learning experience, which influences career goals and actions. When people are confronted with a learning experience, in this case negative career feedback, they may partake in action in the form of lowering their career goals to alleviate psychological distress. Thus, we hypothesize that negative feedback on career goal suitability is positively related to downward career goal revision.

H1: Negative feedback on career suitability is positively related to downward career goal revision.

Career Self-efficacy as Mediator between Negative Feedback and Downward Goal Revision

According to Lent and Brown (2013), learning experiences such as negative feedback later affect cognitions and actions, such as goal revision. They do so through intermediary processes, such as self-efficacy beliefs. They state self-efficacy in career context pertains to the perceived capability of individuals to execute particular tasks essential for career preparation, entry, or adaptation, and it is denoted as career decision self-efficacy (CSDE) (Lent and Brown, 2016). With regard to the Lent & Brown (2013) model of social cognitive career self-management, an application paper by Lent et al. (2017) has shown career decision self-efficacy to be the more important intermediary process, compared to outcome expectations, since it partially mediated the relevant relationship between outcome expectations and career decision making. This would mean self-efficacy beliefs form the most important intermediary process in the model. Low CSDE has been linked to higher levels of career indecision (Choi et al, 2012), and higher levels of CSDE have been linked to more career planning (Rogers, Creed and Glendon, 2008; Rogers and Creed, 2011). A similar concept was introduced by Schyns and Von Collani (2002), occupational self-efficacy, meaning one's confidence in their skills and knowledge at work. Hu et al. (2016) adjusted this concept to fit both career setting, rather than work-related goals, and applied to the Lent & Brown (2013) socio-cognitive model of career self-management. They found lower levels of it to be predictive of more lowering of career goals, and it was found to partially mediate the relationship between negative feedback and intention of career goal revision (Hu et al., 2019). Based on this, negative career feedback on goal suitability leads to a loss of confidence in career skills and knowledge. This may be a distressing experience and people want to alleviate this distress (Carver & Scheier, 1999), so they lower their career goals to make them more attainable. Thus, we hypothesize career self-efficacy to be positively related to downward goal revision, and negatively related to negative

feedback on goal suitability, and to have an indirect effect on the relationship between negative feedback on goal suitability and downward career goal revision.

H2: Through career self-efficacy, there is an indirect effect between negative feedback on career goal suitability and downward career goal revision.

Mindset

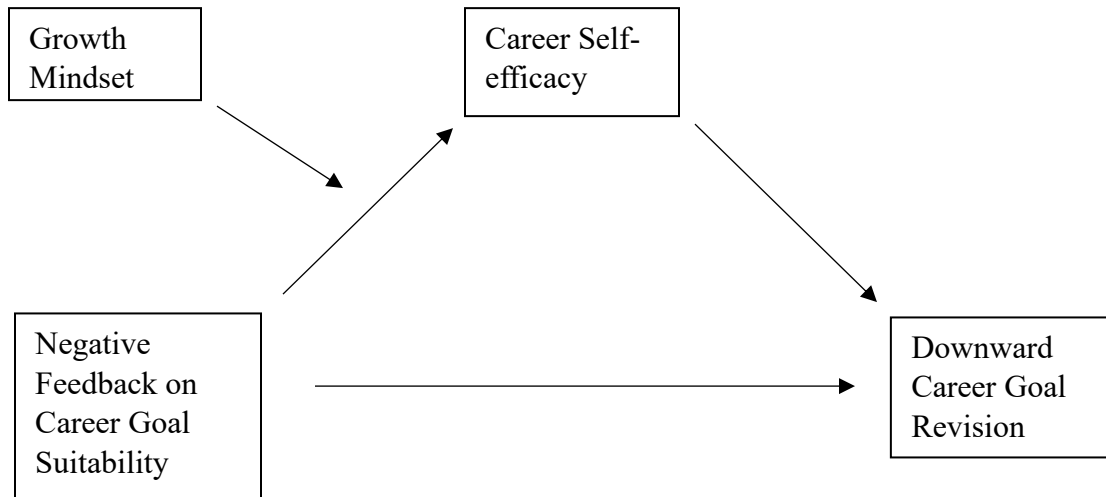
While Lent and Brown's (2013) model shapes understanding into the mechanisms of negative career feedback and career related goals and actions, individual differences may also influence how people deal with negative feedback. In a meta-analytic review, Burnette (2013) proposed mindset as a factor for self-regulation, hinting that people with different conceptualization of the malleability of their skills experience goal pursuit and self-regulation differently. Briefly, the concept of mindset denotes thoughts a person has about the malleability of their skills or competencies (Burnette, 2013). A person can have two perspectives: They may perceive their skills and abilities as improvable or malleable and/or they may perceive them to be unchangeable and uncontrollable. These two perspectives both make up separate dimensions (Murphy & Reeves, 2019; Schmitt et al., 2023). Growth professional skills and abilities mindset has been shown to be an important factor in motivation, behavior and performance (Schmitt & Scheibe, 2023). Specifically, growth mindset has been found to be positively related to people's career adaptability. Career adaptability is a multidimensional concept, and one dimension entails the confidence people have in dealing with setbacks when they occur (Johnston, 2018; Savickas, 1997). This part of career adaptability resembles career self-efficacy beliefs. Similarly, Buenconsejo and Datu (2020) have found holding a growth mindset to be more predictive of higher self-efficacy beliefs, compared to holding a fixed mindset belief, though this was in the form of career exploration self-efficacy. Still, growth mindset and self-efficacy beliefs seem to be

linked. In line with these findings, people may respond in varying degrees to negative career feedback. Based on their beliefs about malleability of skills and abilities, people can be more or less susceptible to changes in self-efficacy beliefs. In this way, holding growth mindset beliefs may buffer the effects of negative feedback on career self-efficacy. Thus, we hypothesize that the indirect relationship between negative feedback on career goal suitability and downward career goal revision via career self-efficacy, will differ in strength between people who are low and high in incremental beliefs.

H3: The indirect relationship between negative feedback on career goal suitability and downward career goal revision via career self-efficacy, will be weaker for people with a tendency to more growth oriented professional skills and abilities mindset.

For an overview of our moderated mediation model, see **Figure 1**. These components respond to the Lent & Brown (2013) socio-cognitive model for career self-management.

Figure 1: *Moderated Mediation Model of Negative Feedback on Career Goal Suitability, Downward Goal Revision, Career Self-efficacy and Growth Mindset with Association Paths.*



Note: Negative career feedback on goal suitability forms learning experiences, which influences career action, in the form of downward career goal revision, through the intermediary process of career self-efficacy beliefs. We add mindset, in the form of a growth mindset to form a moderated mediation model.

Method

Participants

The survey was completed by 108 participants ($M_{age} = 23.84$ years, $SD = 3.3$, range = 20-35, female 50.9%, male 48.1% and other 0.9%). The most prevalent national backgrounds were The Netherlands (65.7%) and Finland (27.8%). Most of the participants were still students (60.2%), others were employed (31.5%), both student and employee (2.8%), or in between jobs (5.6%).

Procedure

This study employed a cross-sectional study design with one wave of data collection. The targeted audience were young adults aged between 18 and 35. This specific age range was chosen due to the explorative period and fluidity of career goals in early adulthood typically lasting until late 20s (Lemme, 1999). The original survey consisted of three surveys, with follow-up surveys taking about five minutes each. Email addresses were collected to contact participants for the second and third waves. The second and third wave are not analyzed in this paper due to time constraints in context of the Bachelor Thesis project. Participants were recruited through a convenience sampling method. Invitations to participate were sent out via messages, email, and recruitment advertisements. Participation was optional, and individuals were informed that the survey would take around fifteen minutes, with follow-ups taking approximately seven. No compensation was offered for participation. Approval from the Ethics Committee of Psychology at the University of Groningen was obtained prior to commencing the sampling procedure. Data collection was conducted online using the Qualtrics survey platform. Participants were provided with detailed information about the study, including its purpose and procedures, through an informed consent form. Only those who provided informed consent proceeded to complete the survey. The survey was open for participation for a four-day period.

Participants were initially asked to provide general demographic information, including age, gender, socioeconomic status, and employment status. Following demographic questions, participants responded to inquiries about their current career goals. Participants were then presented with questions assessing negative career feedback on goal suitability and potential mediators and moderators. These included professional skills and abilities growth mindset and career self-efficacy. Questions assessing downward career goal revision were asked last.

Measures

The overarching study consists of three measurement moments, of which this study only analyses the first wave. The variables relevant to this study consist of negative feedback on career goal suitability, downward career goal revision, career self-efficacy and professional skills and abilities growth mindset.

Negative Feedback on Career Goal Suitability

This measure consisted of 8 items of the 24-item Feedback on Career Goal Inventory (Hu et al., 2016) to assess negative feedback on goal suitability (e.g. “I am told that my preferred career choice will not let me display my real talents”). All items used a 6-point Likert-like format, wherefore 1=*strongly disagree* to 6=*strongly agree* ($\alpha = 0.82$ (Hu et. al, 2016)). From our data, the Cronbach’s alpha also shows good reliability ($\alpha = 0.79$).

Downward Career Goal Revision

This measure consisted of 6 items and was previously used by Hu, Creed & Hood (2017) to assess downward career goal revision. (e.g. “I plan to aim for a career that is less demanding than my current choice.” All items used a 6-point Likert format, wherefore 1= *Strongly disagree*

and 7= *Strongly agree* ($\alpha = 0.88-0.91$ (Hu, Creed & Hood, 2017)). From our data, the Cronbach's alpha also shows good reliability ($\alpha = 0.95$).

Career Self-efficacy

This measure was originally aimed at measuring the concept of occupational self-efficacy. It consisted of 8 items and was validated by Schyns & Von Collani (2002). Hu et al. (2016) adapted this scale to better fit career setting and the Lent & Brown (2013) socio-cognitive model of career self-management. (e.g. From “Thanks to my resourcefulness, I know how to handle unforeseen situations in my chosen work.” to “Thanks to my resourcefulness, I know how to handle unforeseen situations in my chosen career.”) A 6-point Likert type response style was used ranging from 1= *Not at all true* to 6= *Totally true* ($\alpha = 0.80$ (Hu et al. (2016))). From our data, the Cronbach's alpha also shows good reliability ($\alpha = 0.86$).

Professional Skills and Abilities Growth Mindset

This measure consisted of 3 items of the 6-item Professional Skills and Abilities Mindset Scale (Schmitt & Scheibe, 2023). These 3 items measured growth mindset specifically. (e.g. “No matter what job people hold, they can always change their professional skills and abilities.”) All items used a 5-point Likert format, wherefore 1= *Strongly disagree* and 5= *Strongly agree* ($\alpha = 0.72$ (Schmitt & Scheibe, 2023)). From our data, the Cronbach's alpha also shows good reliability ($\alpha = 0.65$).

Statistical Analysis

Before starting analysis of effects in interest of our hypotheses, it is important to do a preliminary analysis to check assumptions are met for (multiple) linear regression analysis. This

includes checking for influential outliers, skewness and homoscedasticity, as well as checking if our distribution is approximately normal. Cronbach's alphas also needs to be analyzed in our sample to make sure our measures are reliable. As for the analysis of effects, we plan to make use of simple linear regression for the main effect, and model 7 in Process v4.2 by Hayes (2022) for the moderated mediation analysis. This model within Process v4.2 is meant to test indirect conditional effects, through multiple linear regression.

Results

Descriptive statistics

The means for downward career goal revision and negative feedback on career suitability were rather low, indicating prevalence was limited in the our sample (see Appendix A, **Table A1**). Aside from the Pearson correlation between growth mindset and negative career feedback on goal suitability, all correlations between focal variables were significant and showed weak to moderate relationships (see Appendix A, **Table A1**).

Preliminary analyses

Before conducting our primary analyses, we checked whether outliers, ceiling- or floor-effects and/or skewness were present, and whether assumptions related to linear regression were met. No significant outliers were present (Cook's distance < 1). Downward career goal revision showed skewness to the right and a floor effect, which may be expected, since most people are unlikely to have plans to downwardly revise their goals in the near future. Growth mindset showed a left side skew and a ceiling effect, but it remained within acceptable values. The normal P-P plot of standardized residuals suggested that the data had approximately normally distributed errors, aside from slight deviations from the assumed line. The scatterplot of standardized residuals confirmed that the data satisfied assumptions of homogeneity of variance and linearity; the scatterplot showed no clear pattern in deviations from 0. There were no significant deviations in variance patterns or indications of linearity violation. Tests assessing collinearity assumptions indicated no concerns regarding multicollinearity (see Appendix A, **Table A2**). Additionally, the data met the assumption of independent errors; the test for autocorrelation indicated low levels of positive autocorrelation (Durbin-Watson value = 1.76). We also checked for age and gender effects. For gender effects, one participant who answered

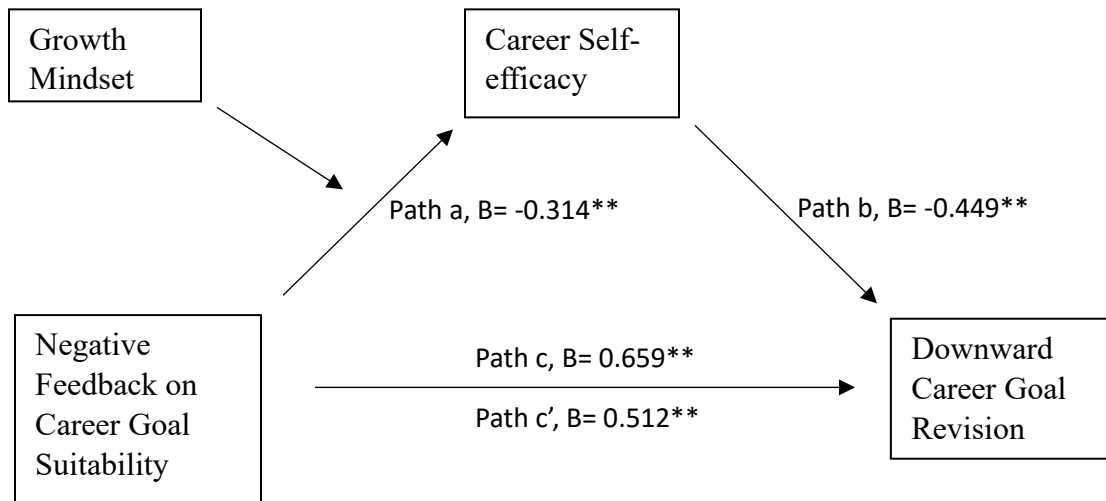
the question for gender with 'other' was excluded, since this one value is not representative of the population. Although gender had significant Pearson correlations with both career self-efficacy and professional skills and abilities growth mindset (see Appendix A, **Table A1**), gender effects were shown to be insignificant in multiple linear regression using dummy coding ($p=0.489$). Age effects were also insignificant effect ($p=0.414$) in multiple linear regression.

Main Analysis

For the main analysis, simple linear regression and the Process v4.2 SPSS-extension by Andrew Hayes (2022) were used. Our simple linear regression consisted of negative feedback on career suitability as independent variable and downward career goal revision as dependent variable. Our analysis using Process was based on a moderated mediation model, which was depicted as model 7 in Process. In this model, the independent variable was negative feedback on career goal suitability, the dependent variable was downward career goal revision, the mediator was career self-efficacy and the moderator was growth mindset (see **Graph 2**). Mean centering was used for all variables that define products. Results are described below based on the steps in the total analysis.

Figure 2

Moderated Mediation Model of Negative Feedback on Career Goal Suitability, Downward Goal Revision, Career Self-efficacy and Growth Mindset with association paths.



Note: * $p < 0.05$. ** $p < 0.01$

Direct Effect Analysis

There was found to be a moderate to strong positive significant correlation between negative feedback on career goal suitability and downward career goal revision, since the 95% CI did not include 0, indicated by path c in **Graph 2**; 95% CI [0.415, 0.904], $B = 0.659$, $p < 0.0001$, $R^2 = 0.212$. This is in line with our hypothesis that negative feedback on career goal suitability leads to more downward career goal revision.

Indirect Effect Analysis

For the mediation analysis model 7 in Process by Hayes (2013) was used. Negative feedback on career goal suitability was found to be a moderate, negative predictor of career self-efficacy, since the 95% CI did not include 0, indicated by path a in **Graph 2**; 95% CI [-0.51, -

0.12], $B = -0.314$, $p < 0.01$. This is in line with the hypothesis that more negative feedback on career goal revision is a predictor of less career self-efficacy.

Career self-efficacy was a significant, moderate and negative predictor of downward career goal revision, since the 95% CI did not include 0, indicated by path b **Graph 2**; 95% CI [-0.67, -0.23], $B = -0.449$, $p < 0.0001$). This is in line with our hypothesis that less career self-efficacy is predictive of more downward career goal revision.

While controlling for career self-efficacy, the negative feedback on career goal suitability was found to be a moderate positive significant predictor of downward career goal revision, since the 95% CI did not include 0, indicated by path c' in **Graph 2**; 95% CI [0.27, 0.75], $p < 0.0001$, $B = 0.512$. This is in line with our hypothesis that negative feedback career on career goal suitability leads to more downward career goal revision.

The indirect effect of career self-efficacy was found to be significant for the mean value of growth mindset, since the 95% CI did not include 0; 95%CI [0.03, 0.35], $R^2 = 0.321$, $p < 0.0001$. This is in line with our hypothesis that career self-efficacy has a mediating effect on the relationship between negative feedback on career goal suitability and downward career goal revision.

Conditional Indirect Effect Analysis

Growth mindset was found to be moderately and positively predictive of career self-efficacy; 95% CI [0,1647, 0.5497], $B = 0.357$, $p < 0.001$. However, the indirect effect of growth mindset and negative feedback on career goal suitability was found to be insignificant, since the 95% CI included 0; 95% CI [-0.25, 0.37], $p = 0.715$. The moderated mediation index was also found to be insignificant (see Appendix A, **Graph A1**), since the 95% CI included 0; 95% CI [-

0.23, 0.12]. This is not in line with our hypothesis of growth mindset being a potential moderator in a moderated mediation model with negative feedback on goal suitability, career self-efficacy and downward goal revision.

Discussion

The goals of our study were (1) to find a positive relationship between negative feedback on career goal suitability and downward career goal revision, (2) to test whether there is an indirect relationship through career self-efficacy and (3) to explore the conditional effect of growth professional skills and abilities on the indirect relationship.

Hypotheses and findings

We had the following hypotheses and relevant supportive findings:

Negative feedback on career suitability was found to be moderately to strongly positively related to downward goal revision.

Our results indicated there was a moderate to strong positive relationship between negative feedback on career suitability and downward career goal revision. Hu et. al (2019) had similar findings. They also found negative career feedback to be related to more downward goal revision. Our findings also support Lent & Brown's socio-cognitive of career self-management (2013), where negative feedback acts as a learning experience, which leads to career related goals and actions, in this case in the form of action, in the form of downward career goal revision.

Through career self-efficacy, there is an indirect effect between negative feedback on career goal suitability and downward career goal revision.

Our results indicated career self-efficacy plays a partially mediating role in the relationship between negative feedback on career goal suitability and downward career goal revision. Hu et al. (2019) have found similar findings, also finding career self-efficacy to be

partial mediator in the relationship between negative career feedback and intention of lowering career goals. It also fits Lent & Brown's socio-cognitive model of career self-management (2013). In their model, self-efficacy beliefs are considered an intermediary process between learning experiences and actions in their model. Specifically, learning experiences may lead to less confidence in employees in their perceived ability in their skills and knowledge in their careers, which, in turn, may affect their career related goals and actions. In our project, career learning experiences consisted of negative feedback on career goal suitability, which was predictive of less self-efficacy beliefs in the form of less career self-efficacy. Lastly, self-efficacy beliefs were also predictive of career related action in the form of less career self-efficacy leading to more downward career goal revision.

The indirect negative relationship between negative career feedback on career goal suitability and downward career goal revision via career self-efficacy was not weaker for people with a tendency to more growth oriented professional skills and abilities mindset.

Our results indicated that differences in growth professional skills and abilities mindset did not have a significant effect on the indirect relationship between negative feedback on career suitability and downward career goal revision via career self-efficacy. Based on findings by Johnston (2018), Savickas (1997) and Schmitt and Scheibe (2023), higher scores on growth mindset have been linked to better outcomes in career adaptability, career motivation and performance. This is why we were interested in the potential role it may play in our model as a buffer against negative effects of unfavorable career feedback. We did find the professional skills and abilities growth mindset to be positively related to career self-efficacy beliefs, which fits findings that higher growth mindset beliefs is related to higher career adaptability. However, it does not act as a buffer against downward career goal revision based on our research. A potential

reason for this may distribution of scores in our data set. For professional skills and abilities growth mindset, we saw a slight ceiling effect in our data. Scores ranged mostly from 3.6 to 4.6 out of 5, meaning we mostly got data on people with medium, medium-high and high growth mindset beliefs. This may have limited the degree to which we were able to find effects for this variable, in the way of not allowing us to see an effect in our limited score distribution, while in a sample with a broader range of scores on professional skills and abilities mindset, effects could present, or at least more apparent. Another point of interest is that we did find career self-efficacy and growth mindset to be related. It is possible mindset may serve a buffering role to negative feedback in combination with another career related concept, such as career goal disengagement, since this concept has been found to be a conceptually different career related action by Hu et. al (2019) and Hu, Creed & Hood (2017). Perhaps growth mindset does not have buffering effects for downward career goal revision in light of negative feedback, but it may do so for career goal disengagement. These same researchers also found stronger or weaker effects depending on the type of negative feedback. We looked only at one type of negative feedback they also included, namely negative feedback on career goal suitability. Another type of negative feedback, such as negative feedback on career goal progress, may still allow growth professional skills and abilities mindset to serve as a buffer against aversive effects of negative feedback.

Limitations

Limitations of our study theory may include the operationalization of our construct for our dependent variable downward career goal revision. We measured downward career goal revision in the form of cognitive intention to lowering career related goals. Changes in intention are not the same as changes in behavior, as demonstrated by findings by Webb and Sheeran (2006), that a medium-to-large change in intention only leads to a small-to-medium change in

behavior. Based on this, a more action-oriented or behavior-oriented measurement of downward career goal revision in relation to negative career feedback would tell us more about the true effects that negative feedback may have on downward career goal revision. Such a measure may consist of measuring times people actually acted on their intentions of lowering career goals by asking them to name behaviors they partook in, in reaction to their intention of lowering their career goal. A behavior-oriented operationalization of downward career goal revision could also be validated through reports by others, such as supervisors. Other people are unable to see cognitive intention of downward career goal revision, yet may be able to see when people truly acted towards less demanding goals, perhaps in the form of employees being less punctual or not taking on challenging tasks they previously would. This could make findings more valid, since such a behavior-oriented measure would not only rely on self-reports and can be cross-validated.

Limitations of our study in methodology may include sampling strategy. We used a convenience sample, and in doing so, sampled mostly acquaintances of university students in a western society, it is likely our sample was skewed to young people with generally high socio-economic status in western countries. This may have limited generalizability of our study findings only to a population that fits this description of being young, living in a western society and being relatively high in socio-economic status. Our survey was also susceptible to demand characteristics. Participants may have had correct suspicions about study goals, and responded in agreement with these expectations. Using some form of deception about the study's goals before starting the questionnaire and adding some unrelated filler questions may improve validity of responses.

Implications

The evidence from our results highlight that negative feedback is related to the level of downward career goal revision a person experiences. Specifically, if someone faces negative feedback that is related to how well their interests, talent and values align with their career (goal), they are more likely to aim for less demanding or challenging career goals. The relationship found between negative feedback and downward goal revision was found to be partially mediated by career self-efficacy. Thus, the more negative feedback someone receives, the more likely they are to be low in career self-efficacy, and the more likely they are to downwardly revise their career goals. Sometimes it may be adaptive to strive to less demanding career goals when the current career goal people hold is too challenging. However, career goals may not always have to be lowered. The goal of providing negative feedback is most likely to allow someone to find ways to improve and attain their career goals. Based on our study, it is important to consider the effect negative feedback may have on the confidence people have in their abilities to deal with career related challenges. When career self-efficacy beliefs are protected, negative feedback may actually have its intended effect of helping people to work towards their current career goal, perhaps in the form of them choosing more strategically what to do next to achieve it, instead of them striving to a less demanding career goal.

Direction future research

A direction for future research may be to find ways to protect career-self efficacy beliefs when people are faced with negative feedback. Based findings in our study, the study by Hu et al. (2019) and the socio-cognitive model of career self-management by Lent & Brown (2013), negative feedback in the form of a learning experience may have a negative effect on the confidence people hold in their abilities to deal with career related challenges, which in turn may

lead to actions in the form of lowering career goal striving. Finding ways to minimize loss of, or better yet, improve career self-efficacy beliefs, while giving negative career feedback may actually allow people to move towards achieve their current career goals. Research into this could take form of an experimental design, wherein numerous interventions to maintain career self-efficacy in light of negative career feedback are explored in different experimental groups. A control group without these interventions and only negative career feedback would allow us to see differences between interventions and no interventions, and say something about how realistic and effective these interventions may be, comparatively and on their own. It may even be interesting to split negative career feedback into three types, as previously indicated by Hu, Creed & Hood (2017), to see if the type of feedback that is provided may allow for these interventions to perform better or be more realistic in maintaining career self-efficacy beliefs.

Conclusion

To conclude, this study explored the relationship between negative career feedback on career goal suitability and downward career goal revision in context of Lent & Brown's (2013) socio-cognitive model of career self-management as theoretical basis. This relationship was found to be moderate-to-strong and positive. Career self-efficacy was explored and found to be a moderate partial mediator in this relationship. Growth professional skills and abilities mindset was explored in a moderated mediation model, but no support for the concept having a conditional indirect effect was found.

References

- Belschak, F. D., & Den Hartog, D. N. (2009). Consequences of positive and negative feedback: The impact on emotions and extra-role behaviors. *Applied Psychology: An International Review*, 58(2), 274–303. <https://doi.org/10.1111/j.1464-0597.2008.00336.x>
- Buenconsejo, J. U., & Alfonso D. Datu, J. (2020). Growth and fixed mindsets about talent matter for career development self-efficacy in selected Filipino adolescents. *Children and Youth Services Review*, 118, 105470. <https://doi.org/10.1016/j.chilyouth.2020.105470>
- 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. (1999). Themes and issues in the self-regulation of behavior. In R. S. Wyer, Jr. (Ed.), *Advances in social cognition* (Vol. 12, pp. 1-105). Mahwah, NJ: Lawrence Erlbaum.
- Choi, B. Y., Park, H., Yang, E., Lee, S. K., Lee, Y., & Lee, S. M. (2012). Understanding career decision self-efficacy: A meta-analytic approach. *Journal of Career Development*, 39(5), 443–460. <https://doi.org/10.1177/0894845311398042>
- Creed, P. A., & Hood, M. (2014). Disengaging From Unattainable Career Goals and Reengaging in More Achievable Ones. *Journal of Career Development*, 41(1), 24-42. <https://doi.org/10.1177/0894845312471195>
- Gottfredson, L. S. (2005). Applying Gottfredson's theory of circumscription and compromise in career guidance and counseling. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 71–100). New York, NY: Wiley.
- Hayes, A. (2022). *Introduction to Mediation, Moderation and Conditional Process Analysis: A regression-based approach*. (3rd Ed.). Guilford Press.

- Hu, S., Creed, P. A., & Hood, M. (2016). Development and initial validation of a measure to assess career goal feedback. *Journal of Psychoeducational Assessment*. Advance online publication. <http://dx.doi.org/10.1177/0734282916654645>
- 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. (2019). Does socioeconomic status shape young people's goal revision processes in the face of negative career feedback? *Journal of Vocational Behavior*, 110(Part A), 89–101. <https://doi.org/10.1016/j.jvb.2018.11.011>
- Hu, S., Hood, M., & Creed, P. A. (2017). Negative career feedback and career goal disengagement in young adults: The moderating role of mind-set about work. *Journal of Vocational Behavior*, 102, 63–71. <https://doi.org/10.1016/j.jvb.2017.07.006>
- 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.proxy-ub.rug.nl/10.1016/j.jvb.2018.02.002>
- Johnston, C. S. (2018). A systematic review of the career adaptability literature and future outlook. *Journal of Career Assessment*, 26(1), 3–30. <https://doi.org/10.1177/1069072716679921>
- 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. doi:10.1037/0033-2909.119.2.254.
- Lemme, B. H. (1999). *Development in adulthood* (2nd ed.). Boston, MA: Allyn & Bacon.
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557–568. doi:10.1037/a0033446

- Lent, R. W., Ezeofor, I., Morrison, M. A., Penn, L. T., & Ireland, G. W. (2016). Applying the social cognitive model of career self-management to career exploration and decision-making. *Journal of Vocational Behavior, 93*, 47–57. <http://dx.doi.org/10.1016/j.jvb.2015.12.007>
- Lent, R. W., Ireland, G. W., Penn, L. T., Morris, T. R., & Sappington, R. (2017). Sources of self-efficacy and outcome expectations for career exploration and decision-making: A test of the social cognitive model of career self-management. *Journal of Vocational Behavior, 99*, 107–117. <https://doi.org/10.1016/j.jvb.2017.01.002>
- Locke, E.A., & Latham, G.P. (2002). Building a practically useful theory of goal setting and task motivation. *American Psychologist, 57*, 705–717.
- Murphy, M. C., & Reeves, S. L. (2019). Personal and organizational mindsets at work. *Research in Organizational Behavior, 39*, 100121. <https://doi.org/10.1016/j.riob.2020.100121>
- Rogers, M. E., Creed, P. A., & Glendon, A. I. (2008). The role of personality in adolescent career planning and exploration: A social cognitive perspective. *Journal of Vocational Behavior, 73*(1), 132–142. <https://doi.org/10.1016/j.jvb.2008.02.002>
- Rogers, M. E., & Creed, P. A. (2011). A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. *Journal of Adolescence, 34*(1), 163–172. <https://doi.org/10.1016/j.adolescence.2009.12.010>
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life span, life space theory. *The Career Development Quarterly, 45*(3), 247–259. <https://doi.org/10.1002/j.2161-0045.1997.tb00469.x>
- 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/10.1177/10690727221120367>
- Schyns, B., & Von Collani, G. (2002). A new occupational self-efficacy scale and its relation to personality constructs and organizational variables. *European journal of work and organizational psychology, 11*(2), 219-241. <https://doi.org/10.1080/13594320244000148>

Webb, T.L., Sheeran, P., 2006. Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin* 132, 249–268

Appendix A

Tables and Graphs Relevant to Results

Table A1

Means, Standard Deviations and Correlations of Focal Variables

	M	SD	1.	2.	3.	4.	5.	6.
1. Downward Career Goal Revision	2.11	.88	x	.46**	-.45**	-.21*	0	-.17
2. Negative Feedback on Career Goal Suitability	2.05	.61	.46**	x	-.30**	-.03	-	.02
3. Career Self-efficacy	4.46	.67	-.45**	-.30**	x	.33**	.14	-.32**
4. Professional Skills and Abilities Growth Mindset	4.16	.62	-.21*	-.03	.33**	x	.02	.16*
5. Age	23.76	3.25	0	-.04	.14	.02	x	.04
6. Gender (Female)	-	-	-.17	.02	-.32**	.16*	.04	x

Note: $N = 107$. * $p < 0.05$ level (1-tailed). ** $p < 0.01$ (1-tailed).

Table A2

Tolerance and VIF Values for Focal variables

	Tolerance	VIF
Negative Feedback on Career Goal Suitability	0.91	1.11
Career Self-efficacy	0.81	1.24
Professional Skills and Abilities Growth Mindset	0.88	1.13

Graph A1

Moderated mediation graph with negative career feedback on career goal suitability, growth mindset and career self-efficacy

