



An image of what I want to achieve: How visions motivate goal pursuit

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Abstract

In a rapidly changing world, leaders are constantly searching for effective ways to motivate employees and drive change. Management scholars agree that an essential tool for inspiring and motivating employees is to communicate a clear vision of the future. Yet, there remains a significant gap in understanding how and why visions actually move individuals to action. The current study investigated the effects of visions on goal-pursuit in comparison to merely listing a “superordinate goal.” We argue that visions, that are high in mental imagery, are motivationally effective because (a) visions evoke positive affect, (b) vision-evoked positive affect spills over to goals derived from the vision, leading to affectively charged goals, (c) affectively charged goals are predictive of increased commitment, and (d) increased commitment contributes to goal progress. In a first experimental study ($N=128$), the findings suggest that visions and vision-derived goals were both higher in positive affect than our control condition. In a second experimental study ($N=323$), we replicated our results from Study 1. In addition, we extended these findings and showed that visions predict goal progress via vision-evoked positive affect, positive anticipatory affect related to prospective vision-derived goal attainment, and goal commitment. Taken together, our studies contribute to research on visions and goals by showing that visions exert their motivational effects by affectively charging activities related to them. From a practical perspective, our studies highlight the importance of visions as an effective tool in motivating work-related behaviors.

Keywords Visions · Goals · Vision pursuit · Positive affect · Motivation

Introduction

In April 1976, Steve Jobs and Steve Wozniak founded one of the largest and most successful companies in the world: Apple Inc. When Steve Jobs was asked what inspired him to start the company, he stated that the foundation of all his achievement had been a strong and compelling vision: “To put a computer in the hands of everyday people.” Drawing on such successful examples, organizational scholars have promoted the idea that *visions*, vivid future-oriented images of a desirable, future state (Carton & Lucas, 2018; Rawolle et al., 2017), can mobilize and motivate goal-directed behaviors related to achieving this desired future (Kehr et al., 2021; Stam et al., 2014), thereby promoting motivation, performance, and work engagement (e.g., Kearney et al.,

2019; Kohles et al., 2012). Altogether, there is substantial evidence that visions guide behavior (Fiset & Boies, 2019; Masuda et al., 2010), in both organizations and individuals.

Despite the practical importance of the relationship between visions and motivational outcomes, surprisingly little effort has been made to identify how and why visions stimulate and drive behavior (Kohles et al., 2012; Paine et al., 2023;). Indeed, scholars have consistently noted that the processes by which visions motivate behavior are still “ill-understood” and have suggested that there is still much to learn about the mediators of vision effectiveness (Fan et al., 2022). Understanding the mediators underlying the relationship between visions and vision-related behaviors, such as follower psychological states, is critical because it may help practitioners better understand how to craft visions that effectively translate into follower actions (Kehr et al., 2021). Thus, in the current paper, we aim to shed light on the processes by which visions lead to increased motivation and successful goal pursuit.

One potential mediator of the relationship between visions and vision-related behaviors is positive affect.

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Several authors have suggested that the vivid mental imagery induced by a vision is a key aspect of its motivating power (e.g. Carton & Lucas, 2018; Kehr et al., 2021; Masuda et al., 2010). Specifically, researchers speculated that the stimulation of future events in one's mind's eye (Masuda et al., 2010) is "emotionally engaging" (Carton & Lucas, 2018, p. 2108). In support of this notion, studies have shown that mental images evoke affective reactions (e.g. Emrich et al., 2001; Rawolle et al., 2017). However, even if positive affect is commonly recognized as a key factor in motivation (e.g., Aarts et al., 2008), research has yet to empirically investigate whether vision induced positive affect does indeed increase the motivation for vision-related behaviors (Paine et al., 2023).

The present study seeks to address this research gap. By integrating findings from research on mental imagery (e.g., Schubert et al., 2020) and organizational research on visions (e.g., Carton & Lucas, 2018), we propose that visions evoke positive affect. Further, we draw on *goal systems theory* (Fishbach & Woolley, 2022; Kruglanski et al., 2018) specifically, what Fishbach et al. (2004) call "emotional transfer" (see also Woolley & Fishbach, 2023) and propose that vision-evoked positive affect can transfer to vision-derived goals (Stam et al., 2014). In line with research that has demonstrated the importance of positive affect in goal pursuit (e.g., Aarts et al., 2008), we argue that vision-evoked positive affect will foster goal commitment and ultimately goal progress. Goal progress is a key construct for capturing the degree of agency with which individuals pursue their vision-derived goals (e.g., Holtschlag et al., 2020). Figure 1 illustrates our theoretical model.

We test these hypotheses in two experimental studies. In Study 1, using a mixed sample of consultants and business students, we examine whether visions evoke more positive affect than a control group (superordinate goals), and whether vision-evoked positive affect spills over to the goals a person derives from that vision. In Study 2, using a sample of business students we aim to replicate and extend our findings by examining the downstream behavioral consequences of vision-evoked positive affect in a time-lagged design.

The current research makes three important contributions to the literature. First, we show that visions evoke positive affect, which in turn motivates goal pursuit. In doing so, we add to the scarce research on the specific mechanisms by which visions motivate behavior (e.g., Venus et al., 2019) by linking research on mental imagery and its affective consequences (Rawolle et al., 2017) to research proposing the importance of vision-evoked emotion for motivation and performance (Carton & Lucas, 2018). In doing so, we not only add to the understudied field of visions mediators (e.g., Fan et al., 2022), but also respond to a recent call by Paine

et al. (2023) to examine the role of emotions as a mediating mechanism in vision effectiveness. As a result, our research provides a more comprehensive view of how visions motivate vision-related behaviors.

Second, we extend research on visions by examining how visions relate to goals that are hierarchically related to them. To date, although scholars have repeatedly called for the integration of research on visions and goals (Berson et al., 2015) and have speculated that goals are complementary to visions (Southwick et al., 2019) such that visions need to be translated into actionable and specific goals (Carton & Lucas, 2018; Stam et al., 2014), to our knowledge, little research has empirically examined visions and goals in synthesis. Drawing on goal system theory, particularly work on emotional transfer in goal systems (Fishbach & Woolley, 2022; Kruglanski et al., 2018), we introduce vision-affect spillover as a potential mechanism by which visions affectively charge lower-level goals derived from them. Thus, our findings illustrate how visions, when they evoke positive emotions, can effectively infuse lower-level goals with these emotions, enhancing the pursuit of these goals and thereby actualizing the pursuit of the vision (Stam et al., 2014).

Third, we examine the effect of visions at the individual behavioral level. Research on visions has primarily focused on the collective level (e.g., Kipfelsberger et al., 2022), even though visions start by operating on the individual level in motivating and affecting a person's behaviors (Kehr et al., 2021). Building on theorists (Fiset & Robinson, 2020) who speculate that individual-level visions may be an important factor in career development, our study provides new insights into how individual visions motivate and shape career trajectories, thereby advancing our understanding of the role of visions in personal and career development contexts.

The motivational effect of visions: Mental imagery and positive affect

Organizational scholars propose that visions are future-oriented images (Baum et al., 1998; Carton & Lucas, 2018; Stam et al., 2014). Consistently, we define visions as "mental images of a desirable future" (Rawolle et al., 2017, p. 770, see also Carton & Lucas, 2018). This definition highlights a vision's unique characteristic: the fact that it is visual (Kehr et al., 2021; Rawolle et al., 2017). More specifically, visions are individual-level cognitions (Stam et al., 2014) that exist in a picture-like format and are based on imagery (Berson et al., 2015; Emrich et al., 2001). In contrast, goals, commonly defined as objects or aims of an action (Locke & Latham, 1990), are considered to be mainly cognitive representations of a target state (Kruglanski et al., 2002). However, apart

from the visual element, visions and goals are conceptually overlapping and share certain characteristics (e.g. both refer to desirable end states, Kirkpatrick & Locke, 1996). According to goal systems theory (Kruglanski et al., 2002) this applies particularly to superordinate goals (i.e., “higher-level, long-term, and abstract goals”). That is, visions also represent higher level, long-term goals with the important distinction that visions contain mental imagery while superordinate goals are rather abstract (Berson et al., 2015).

Mental imagery, the distinctive characteristic of visions, refers to “an experience like perception in the absence of a percept” (Holmes et al., 2016, p. 2). Thus, mental imagery allows people to relive their past or imagine their future and experience sensory information (e.g., “seeing a visual scene in the ‘mind’s eye”, Carton & Lucas, 2018, p. 2115) without being directly exposed to an external stimulus.

Particularly in clinical psychology, a growing body of research was able to demonstrate the positive relationship between mental imagery and positive affect (for a review see Holmes et al., 2016). Clinical psychologists assume that mental imagery, especially in the form of vividly imagining personal future events, boosts positive affect (for a recent meta-analysis, see Schubert et al., 2020).

Further support for the notion that mental imagery evokes positive affect comes from various lines of research. Work on heuristics (for a review see Schwarz, 2012) for instance, showed that verbal descriptions of images are more likely to elicit emotions compared to abstract concepts. Organizational scholars (e.g. Emrich et al., 2001) demonstrated that using more imagery in presidential speeches elicited stronger emotional reactions. Empirical research on vision communication by Naidoo and Lord (2008) indicated that subjects who listened to a speech high in imagery showed more emotional reactions than a control group. Lastly, a recent study by Fiset and Boies (2019) found a positive relationship between a leader’s vision and follower emotional outcomes. Their study used a matched sample of teachers and principals and disclosed that principals who communicated a vividly imaginable vision increased teachers’ perceptions of affective tone (i.e., the frequency with which they experienced positive emotions at work). In line with these different streams of research, visions that contain mental imagery (Carton & Lucas, 2018) should evoke positive affect (Rawolle et al., 2017). The same should not apply to the control group (superordinate goals) due to their cognitive nature (Kruglanski et al., 2002) (see Fig. 1; path A). We, therefore, hypothesize the following:

Hypothesis 1 Visions evoke more positive affect as compared to a control group (superordinate goals).

Visions affectively charge vision-derived goals

A substantial amount of research has highlighted the role of positive affect in motivating and influencing behavior (e.g. Aarts et al., 2008; Custers & Aarts, 2005). Likewise, positive affective reactions evoked by visions are speculated to motivate people to action (Carton & Lucas, 2018; Fiset & Boies, 2019; Paine et al., 2023). However, it is difficult to directly measure the influence of positive affect on vision-pursuit since visions are conceptualized as open-ended endeavors (Berson et al., 2015), which are never fully achieved (Kirkpatrick & Locke, 1996). Stam et al. (2014) have therefore suggested that it may be helpful to conceptualize visions “in terms of a goal hierarchy in which the vision is a high-level goal that is hierarchically related to lower-level goals” (p. 1174). Following this framework, Stam et al. (2014) defined *vision pursuit* as all “goal-directed actions that are hierarchically related to the vision” (p. 1174). Building on Stam and colleague’s (2014) conceptualization, we propose a spillover hypothesis whereby visions affectively charge lower-level goals that are derived from them.

The prediction that positive affect evoked by a vision might transfer to goals derived from the vision is supported by two different lines of research: affect transfer in goal systems and affect in self-regulation. First, research on affect transfer in Goals Systems Theory (Kruglanski et al., 2002) suggested that positive emotions associated with goal attainment can transfer to activities performed to pursue the goal (Fishbach et al., 2004; Kruglanski et al., 2018; Woolley & Fishbach, 2023). For example, Fishbach et al. (2004) conducted five experiments that demonstrated that positive affect associated with goal attainment (e.g., keeping fit) were transferred to means (e.g., running every morning) by pure association (see also Kruglanski et al., 2018).

Second, literature on self-regulation demonstrates that positive affect can serve as a temporary heuristic and/or an affective cue, that influences subsequent judgments about personal goals and related emotions (for a review see Schwarz, 2012). For example, researchers have demonstrated that imagining *best possible selves*, defined as representations of personal hopes and fears regarding the future, leads to affective responses that can emotionally charge the representation of a goal (for a recent review see Oyserman & Horowitz, 2023).

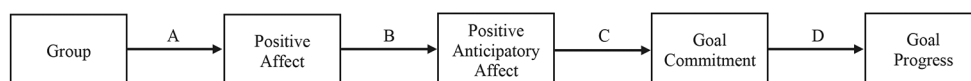


Fig. 1 Hypothesized theoretical model. *Note.* Group was coded as 0 = superordinate goal and 1 = vision

Similar to how imagining best possible selves can emotionally charge goals, we propose that visions-evoked positive affect spills over to vision-derived goals. In particular, this should lead individuals to anticipate how these positive affective reactions relate to the achievement of a derived goal. Thus, we assume that vision-evoked positive affect spills over in the form of *positive anticipatory affect* (i.e., “positive emotions that are currently experienced due to something that could happen in the future,” Baumgartner et al., 2008, p. 685). However, for the control group (superordinate goals), which are expected evoke less positive affect, this affect should attenuate (see Fig. 1; paths A and B). Thus, we predict the following:

Hypothesis 2 The positive effect of visions (compared to a control group) on positive anticipatory affect is mediated by positive affect.

Vision-induced positive anticipatory affect increases goal commitment and goal progress

As stated before, much research has shown the importance of positive affect as a proxy for motivation (e.g. Aarts et al., 2008; Custers & Aarts, 2005). Researchers suggest that positive affect acts as an “implicit motivator” (Custers & Aarts, 2005, p. 129) in the achievement of goals, stating that striving for goals is an “inherently affective experience.” Past research has even demonstrated that positive affect is associated with an increased expectancy to reach one’s goals, which in turn fosters more effort to attain a goal (Fishbach et al., 2010).

In addition to affective reactions related to present events, people also experience emotions with the prospect of future events (Bagozzi et al., 1998; Baumgartner et al., 2008), so called anticipatory affect. Much like momentary affective reactions, scholars argue that positive anticipatory affect can guide decision making (for a recent meta-analysis, see Chitraranjan & Botenne, 2023). More specifically, emotional theorists posit that positive anticipatory affect can influence behavior by determining the expectancy and desirability of future events (Bagozzi et al., 1998; Baumgartner et al., 2008). This assumption is supported by the goal setting literature, which argues that the expectancy of goal attainment is one of the most “proximal antecedents of goal commitment” (Klein et al., 2001, p. 885, i.e., people’s attachment or determination to reach a pursued goal, Locke & Latham, 1990). Indeed, some empirical research has demonstrated that positive anticipatory affect encourages goal-directed behavior (Bagozzi et al., 1998; Baumgartner et al., 2008). For example, Harvey and Victoravich (2009) found that managers with higher positive anticipatory affect showed

increased commitment to an ongoing project as they considered that project achievement is more likely (see also Ding, 2019).

Accordingly, we propose that heightened positive anticipatory affect evoked by a vision-derived goal is related to stronger goal commitment. Specifically, we argue that visions evoke positive affect, which in turn spills over in the form of positive anticipatory affect and ultimately fosters goal commitment (see Fig. 1; paths A, B, and C). As such, we propose the following integrative hypothesis:

Hypothesis 3 The positive effect of visions (compared to a control group) on goal commitment is sequentially mediated by positive affect and positive anticipatory affect.

Researchers argue that goal commitment is one of the most critical requirements of goal progress (Locke & Latham, 1990; Monzani et al., 2015). Individuals who focus on their commitment to a goal also increase their engagement in pursuing that goal (Fishbach et al., 2010), which ultimately leads to higher performance (Klein et al., 2001). Consistent with these results, Monzani et al. (2015) demonstrated in two studies that individuals who showed higher commitment to their personal goals were subsequently more likely to report higher levels of goal progress (for a similar finding see Rafeian & Sharif, 2022). Consistent with our serial mediation hypothesis, we propose that visions are positively associated with positive affect, positive anticipatory affect, goal commitment, and ultimately goal progress (see Fig. 1; paths A, B, C, and D). Therefore, we hypothesize:

Hypothesis 4 The positive effect of visions (compared to a control group) on goal progress is mediated by goal commitment.

Present research

The central aim of this study is to better understand the mechanisms underlying the motivational effects of visions. We argue that visions are by definition rich in mental imagery and are motivationally effective because (a) they evoke positive affect, (b) vision-evoked positive affect is transferred to goals derived from the vision, leading to affectively charged goals, (c) affectively charged goals lead to increased goal commitment, and (d) increased goal commitment facilitates goal progress. We tested our hypotheses in two online experiments. In Study 1, we used a cross-sectional experimental design to test our first two hypotheses (see paths A and B; Fig. 1) in a sample of consultants and business students. In Study 2, we used a time-lagged experimental design to test the full model (Hypotheses 1–4,

see paths A, B, C, and D; Fig. 1) in a sample of business students.

Study 1

As a first step, Study 1 used a cross-sectional design to test our experimental manipulation and examine whether more mental imagery and positive affect were found in visions than in superordinate goals (path A; Fig. 1). In addition, we tested the extent to which the positive affect evoked by visions “spills over” to a goal derived from the vision (paths A and B; Fig. 1).

Method

Participants

For Study 1, we recruited 141 participants, of which 13 had to be excluded due to premature termination of the questionnaire. To increase the external validity of the results, we collected both, 68 undergraduate students of a large German business school (50 women and 18 men; $M_{\text{age}} = 24.1$ years), and 60 full-time employees (11 women and 49 men; $M_{\text{age}} = 41.6$ years) of two medium-sized management consultancies.¹ Following recent recommendations (Ward & Meade, 2022), we examined nonsense response patterns and outliers in terms of completion time and Mahalanobis Distance. Two participants did not meet these criteria and were excluded from consecutive analyses. In support of the robustness of our results, the results of Study 1 remained the same irrespective of the identified outliers. The final sample consisted of 126 participants (61 women and 65 men; $M_{\text{age}} = 32.17$). Participation in the study was voluntary, and participants had to give informed consent. Student participants were recruited through advertisements in lectures, whereas the full-time employees were contacted personally. Student participants were eligible to receive course credit for their participation in the study.

Procedure

Participants were informed that the study’s primary purpose was to find out more about their future career aspirations. In the first phase, participants provided informed consent and

completed a pre-intervention positive affect measure. Then they were randomly assigned to one of two experimental conditions (vision vs. superordinate goal).

Participants received specific instructions appropriate for their respective experimental conditions in the second phase. In both conditions, participants were first asked to consider how they see their professional future. Respective to the condition they were either accompanied with a definition of the concept vision (“the mental image of a desirable future”, see Rawolle et al., 2017) in the experimental condition or superordinate goal (“an objective that is important to us and that we want to achieve in the long term,” see Kruglanski et al., 2002). Then, participants were prompted with a free text field and asked to describe either their vision or superordinate goal for their professional future in several sentences.

In a third phase, participants in both conditions received an imagery exercise during which they imagined a lemon using all their senses to familiarize them with mental imagery (Holmes et al., 2016). In a fourth phase, participants in the vision condition performed a guided visualization. Because various studies have shown that the visual component is the key feature of visions (Carton & Lucas, 2018; Kehr et al., 2021; Masuda et al., 2010; Rawolle et al., 2017), we chose guided visualization as a method to administer the vision. During the guided visualization, participants were asked to imagine their vision to evoke mental images in their minds (Rawolle et al., 2017). Concretely, participants were asked to “embark on a journey through time into the future to the moment when [their] vision has come true” and “to vividly imagine [their] described vision, just as if [they] were dreaming it.” Concreteness was heightened by questions such as the following: “How can you tell that your vision has come true? What do you see? What surrounds you?” In the superordinate goal condition, participants had to imagine and subsequently write down their typical day (adapted from Sheldon & Lyubomirsky, 2006) which is a frequently used active control group in the context of the studies of mental imagery (for a systematic review and meta-analysis see Schubert et al., 2020). Specifically, participants were provided with a text field and requested to imagine [their] typical day, to “write about [their] typical day, and the kinds of things that happen during it” and to “outline [their] typical day in as much detail as [they] can.” (Sheldon & Lyubomirsky, 2006, p. 77). Both conditions were of equal length; the guided visualization and the typical day task lasted 6 minutes.

In a fifth phase, after our experimental manipulation, mental imagery and post-intervention positive affect were assessed. In a sixth phase, participants in both experimental conditions were then asked how they wanted to achieve either their vision or their superordinate goal. For this

¹ These two samples were examined for differences before being merged. Consistent with our goal of diversifying the sample, the second sample contained a significantly higher proportion of men ($t(124) = 7.33, p < .001$) and older participants ($t(124) = 11.6, p < .001$). Moreover, we tested for similarity of effects across both subgroups (students vs. consultants) and conducted all analyses with subgroup as a covariate. The analyses yielded the same pattern of results, so we combined the samples for additional power and diversification.

phase, participants in both conditions were asked to formulate three goals they might pursue in the upcoming weeks to get closer to their vision or superordinate goal. In addition, all subjects were instructed to formulate their goals as concretely and specifically as possible (Locke & Latham, 1990) and to begin their goals with the words “In the following weeks, I will...” Examples of goals reported by the respondents include: “In the following weeks, I’ll be searching online for job ads to finally find and apply for a working student position at a startup.” or “In the following weeks, I’ll try to finish developing the precursor app system that is central behind the value creation of my startup.” Lastly, participants were asked to choose one of their listed goals, which seemed to be the most important for achieving their vision or superordinate goal.

In a seventh and final phase, participants then completed a measure assessing their positive anticipatory affect regarding attaining their previously selected vision- or superordinate goal derived goal.

Measures

Positive affect. Participants completed the 10-item positive affect scale of the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). The scale measures the extent to which participants currently experience ten positive affective states (e.g., to feel excited, proud, inspired; 0 = not at all; 5 = totally). Participants’ positive affect was assessed at baseline and after the experimental manipulation, with the scale indicating sufficient reliability (ω s = 0.85 and 0.92 for pre and post, respectively).

Positive anticipatory affect. Positive anticipatory affect was measured using six items developed by (Bagozzi et al., 1998). The scale measures the extent to which participants anticipate experiencing positive emotions if they succeed in attaining their goal (e.g., excited, delighted, happy; 0 = not at all; 6 = totally; ω = 0.84).

Mental imagery. Mental imagery was assessed as a manipulation check to test for expected differences in the vision and superordinate goal condition. We used three items developed by Carton and Lucas (2018) (e.g., “Right now there is a visual scene playing in my ‘mind’s eye’”; 1 = disagree to 7 = agree; ω = 0.80).

Control variables. In line with recent recommendations for including control variables (Becker et al., 2016), we considered participants’ age and gender as potential controls. Previous research has found that these two sociodemographic variables may influence positive affect (e.g., Fujita et al., 1991; Pinquart, 2001). In addition, to obtain a valid estimate of the intervention effect on positive affect, we followed previous research (e.g., Hülshager et al., 2013) and considered baseline positive affect as a possible control (van

Breukelen, 2013). All analyses were tested with and without these covariates (Becker et al., 2016). The results remained stable with and without the covariates. Thus, the effects of our control variables on the relationships we examined can be considered negligible (Becker et al., 2016).

Results

Manipulation check

First, we tested whether our experimental conditions (visions vs. superordinate goals) were successful by comparing the scores of participants’ mental imagery after the completion of each intervention. As expected, results from the manipulation check showed that participants in the vision condition ($M = 5.39$, $SD = 1.04$) had significantly higher mental imagery scores compared to participants in the superordinate goal condition ($M = 4.72$, $SD = 1.60$), $t(124) = 2.80$, $p = .006$.

Hypotheses tests

Means and standard deviations of all variables are shown in Table 1. Table 2 shows their zero-order correlations. To test our hypothesis that visions as compared to superordinate goals evoke more positive affect and that positive affect mediates the effect of visions on positive anticipatory affect, we followed the recommendations of Hayes (2022). The mediation effect analysis was conducted using the Bootstrap method ($n = 5000$) and standardized effects due to different Likert scale points across variables (e.g., 5-point Likert-type scale vs. 6-point Likert-type scale). SPSS version 26.0 (IBM Corp., 2019) and R (R Development Core Team, 2013) were used for the analyses. We entered positive anticipatory affect as the dependent variable, experimental condition (coded as 0 = *superordinate goal*, 1 = *vision*) as the independent variable, positive affect as the mediator and pre-intervention positive affect as a covariate.

The mediation analysis, which is illustrated in Fig. 2, revealed that participants in the visions group reported higher positive affect than people in the superordinate goal group ($a = 0.50$, $p < .01$, 95% CI [0.31, 0.70]), which in turn predicted positive anticipatory affect ($b = 0.35$, $p < .01$, 95% CI [0.14, 0.56]). The biased-corrected bootstrap confidence interval (based on 5,000 samples) for the indirect effect was significant ($ab = 0.25$, 95% CI [0.09, 0.42]). Thus, these results provide support for hypothesis 1 in that visions, compared with superordinate goals, evoke more positive affect. Moreover, these results provide support for hypothesis 2 in that positive affect mediated the relationship between visions and positive anticipatory affect.

Table 1 Means and standard deviations of the two conditions for the variables

Variables	Vision		Superordinate Goal	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Study 1				
1. Positive Affect (pre)	3.25	0.70	3.35	0.55
2. Positive Affect (post)	3.77	0.74	3.34	0.73
3. Mental Imagery	5.39	1.04	4.72	1.60
4. Positive Anticipatory Affect	6.10	0.83	6.20	0.89
5. Age	32.9	12.8	31.3	11.2
6. Gender	1.57	0.50	1.46	0.50
Study 2				
1. Positive Affect (pre)	3.11	0.62	3.11	0.66
2. Positive Affect (post)	3.64	0.70	3.11	0.70
3. Mental Imagery	5.27	1.13	4.61	1.33
4. Positive Anticipatory Affect	5.90	0.80	5.90	0.80
5. Goal Commitment	4.27	0.54	4.33	0.55
6. Goal Progress	2.85	0.87	2.95	0.96
7. Age	21.5	2.10	21.6	2.32
8. Gender	1.62	0.49	1.57	0.49

Note. *SD* = Standard deviation. Group was coded as 0 = superordinate goal and 1 = vision.

Gender was coded with 1 = female and 2 = male. Age was measured in years.

Table 2 Zero-order correlations of the variables

Variables	1	2	3	4	5	6	7	8	9
Study 1									
1. Group	—								
2. Positive Affect (pre)	−0.07	—							
3. Positive Affect (post)	0.28**	0.60**	—						
4. Mental Imagery	0.24**	0.24**	0.43**	—					
5. Positive Anticipatory Affect	−0.09	0.13	0.26**	0.27**	—				
6. Age	0.06	0.12	0.03	−0.12	−0.33**	—			
7. Gender	0.10	−0.05	−0.10	−0.16	−0.43**	0.39**	—		
Study 2									
1. Group	—								
2. Positive Affect (pre)	0.00	—							
3. Positive Affect (post)	0.34**	0.60**	—						
4. Mental Imagery	0.26**	0.21**	0.37**	—					
5. Positive Anticipatory Affect	−0.02	0.21**	0.29**	0.25**	—				
6. Goal Commitment	−0.07	0.14**	0.18**	0.13**	0.39**	—			
7. Goal Progress	−0.06	0.12*	0.16**	0.10	0.07	0.17**	—		
8. Age	−0.03	−0.01	−0.02	0.00	−0.00	0.00	−0.03	—	
9. Gender	0.05	0.05	0.03	0.06	−0.15**	−0.08	0.04	−0.11*	—

Note. Group was coded as 0 = superordinate goal and 1 = vision. Gender was coded with 1 = female and 2 = male. Age was measured in years.

* $p < .05$, ** $p < .01$

Discussion

The results of Study 1 supported Hypotheses 1 and 2. First, we were able to show that visions evoke more positive affect compared to a control group (superordinate goals). Based on research that has shown that positive affective experiences are promoted by mental imagery, our results may point to a mode of action of visions.

Specifically, the results suggest that visions, which by definition are high in mental imagery, may exert their motivational influence on individuals by eliciting positive affect. Second, consistent with our expectations, we showed that the positive influence of visions on positive anticipatory affect is mediated by positive affect. This finding provides a first indication that the motivational properties of a vision can be transferred to a goal derived

from it (Fishbach et al., 2004). These results also provide an interesting starting point for exploring the motivational consequences of visions.

Although the results presented are consistent with our predictions, we note several limitations. First, although, as noted above, positive affect is an important proxy for motivation (Custers & Aarts, 2005), it is critical to examine the downstream consequences of vision-evoked positive affect, such as commitment and subsequent progress toward a vision-related goal (see Fig. 1). Second, even though the study used an experimental design, it was a cross-sectional design, which is at risk for common method bias. Therefore, the introduction of a time-lagged examination of downstream effects would be important to mitigate concerns associated with common method biases (Cooper et al., 2020; Podsakoff et al., 2012). To address these issues, we conducted Study 2, assessing both goal commitment and progress, while measuring goal progress two weeks after the initial goal formulation.

Study 2

In Study 2, we first aimed to replicate the results of Study 1 by again testing the extent to which visions compared with superordinate goals evoke positive affect and the indirect effect of visions on positive anticipatory affect, via positive affect. Secondly, we proposed a serial mediation model to determine whether positive affect and positive anticipatory affect would serially mediate the association between visions and goal commitment. We also sought to investigate if heightened goal commitment leads to higher goal progress. Ultimately, these objectives propose a model in which visions—through positive affect, positive anticipatory affect, and goal commitment—lead to higher goal progress (paths A, B, C, and D; Fig. 2).

Method

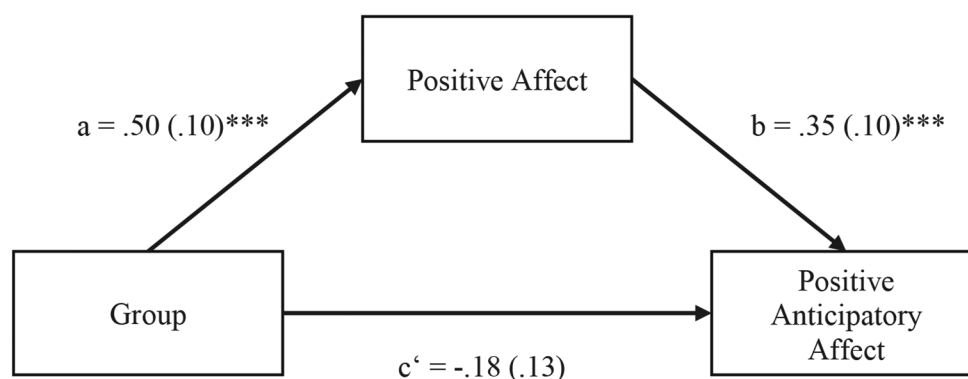
Participants

We conducted a time-lagged study with two measurement waves to test our hypotheses. We recruited 507 participants at a large German business school, of which 58 had to be excluded due to premature termination of the questionnaire and insufficient German language proficiency (CEFR level lower than C1). Following the approach of Study 1, we inspected careless responses and multivariate outliers in terms of completion time and Mahalanobis Distance (Ward & Meade, 2022). 5 participants did not meet the criteria and were excluded from subsequent analyses. To ensure the robustness of our results, we conducted our analyses for Study 2 with and without excluding those 5 participants, but found the same results. The final sample in Study 2 consisted of 444 participants (195 women, 247 men, 2 diverse; $M_{\text{age}} = 23.6$ years). Participants were recruited through online advertisements and lectures and were able to receive course credit for their participation in the study.

Procedure

The procedure resembled Study 1, except that for the vision- or superordinate goal derived goals, goal commitment and positive anticipatory affect were also assessed. Two weeks later, participants received an invitation to the second part of the study. In the second measurement wave, participants were presented their vision- or superordinate goal derived goal which they had formulated in the first part of the study and were asked to rate the progress they had made towards attaining this goal. In total, 321 participants (71.9%) responded to the second survey (129 women, 192 men; $M_{\text{age}} = 21.6$ years). Participation in both studies was voluntary, and participants had to give informed consent.

Fig. 2 Mediation model depicting the relation between group (vision vs. superordinate goal) and positive anticipatory affect as mediated by positive affect. *Note.* Group was coded as 0 = superordinate goal and 1 = vision. Regression coefficients are all in standardized form, and standard errors are given in parentheses. Symbol c' represents the direct effect of group on positive anticipatory affect. $p < .05$, $** p < .01$



Measures

Positive affect, positive anticipatory affect, and mental imagery. Positive affect ($\omega=0.85$ and 0.91 for pre and post, respectively), positive anticipatory affect ($\omega=0.84$), and mental imagery ($\omega=0.77$) were assessed with the same scales as in Study 1.

Goal commitment. Participants had to rate five items assessing their goal commitment using (Klein et al., 2001) five-item scale (e.g., “I am strongly committed to pursuing this goal.”, 1 = strongly disagree, 5 = strongly agree, $\omega=0.53$).²

Goal progress. Goal progress was assessed with four items developed by Greguras and Diefendorff (2010) (e.g., “I have made considerable progress toward attaining this goal”; $\omega=0.87$). Responses were anchored on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Control variables. As in Study 1, we considered the potential effects of age and gender on positive affect (e.g., Fujita et al., 1991; Pinquart, 2001). Moreover, as in Study 1, we also controlled for baseline positive affect scores (van Breukelen, 2013) to obtain a valid estimate of the intervention effect on positive affect (e.g., Hülshager et al., 2013). Like in Study 1, we ran all analyses were tested with and without these covariates (Becker et al., 2016). The findings were stable with and without the covariates. Therefore, the effects of our control variables on the relationships we examined can be regarded as negligible (Becker et al., 2016).

Analyses

The analyses were performed using the same software as in Study 1. Our analytical approach was guided by the two-step strategy to analyze mediation effects proposed by Anderson and Gerbing (1988). Prior to hypothesis testing, we first conducted a confirmatory factor analysis (CFA) to verify our measurement model and ensure that each of our latent variables was represented by its indicators. Second, we performed structural equation modeling (SEM) analysis to measure the

model fit and path coefficients for our hypothesized structural model. According to the recommendations put forth by Hayes (2022), the mediation effect analysis was conducted using the Bootstrap method ($n=5000$) and standardized effects. Measurement models and the statistical model were estimated with a robust Maximum-Likelihood (MLM) estimator. Model fit was evaluated using four indexes (Kline, 2016), with the cutoff criteria being: (a) normed chi-square index χ^2/df of 3 or less; (b) $CFI \geq 0.90$; (c) $RMSE \leq 0.08$, and (d) $SRMR \leq 0.08$ (Kline, 2016).

Results

Measurement model

First, we tested the fit of our four-factor measurement model, $\chi^2/df=2.1$, $CFI=0.91$, $RMSEA=0.05$, and $SRMR=0.05$, which confirmed that the measurement model revealed a fairly good fit with the data. We then compared the fit indices to two plausible alternative models (see Table 3). Specifically we compared our model to two three-factor models that combined into one factor (a) the first mediator and the second mediator (positive affect and positive anticipatory affect), and (b) the second mediator and the first outcome variable (positive anticipatory affect and goal commitment). Thereafter, we calculated fit statistics for a model that combined all four variables. The results illustrated that the measurement model fits the data significantly better than all three alternative models (all p -values < 0.001), with the best-fitting alternative model being the four-factor model combining positive anticipatory affect and goal commitment ($\chi^2/df=2.2$, $CFI=0.88$, $RMSEA=0.06$, and $SRMR=0.05$). These fit indices, and the fact that all factor loadings of all indicators on their respective latent variables were significant, indicate adequate discriminant validity of the variables in our model.

Table 3 Measurement Model Comparisons (Study 2)

Model	χ^2	Df	$\Delta\chi^2$	CFI	RMSEA	SRMR
4-Factor Model	530.5	269		0.91	0.05	0.05
3-Factor Model A	1075.0	272	544.5	0.70	0.10	0.11
3-Factor Model B	565.5	272	35.0	0.88	0.06	0.06
1-Factor Model	1662.8	275	1132.3	0.48	0.12	0.14

Note. 3-Factor Model A denotes a model in which positive affect and positive anticipatory affect were combined into one factor. 3-Factor Model B denotes in a model in which positive anticipatory affect and goal commitment were combined into one factor

² The reliability of the goal commitment scale did not improve by removing one or more items. We therefore follow earlier research that found similar low reliability coefficients and retained the measure as it was assessed in previous research (Klein et al., 2001).

Structural model testing

We tested the structural equation model depicted in Fig. 3, illustrating the properties of the research hypothesis, including all the standardized path coefficients. The structural-modeling results suggested that the hypothesized had an adequate model fit, $\chi^2/df=2.4$, CFI=0.98, RMSEA=0.07, SRMR=0.03.

Manipulation check

Consistent with Study 1, results from the manipulation check showed that participants in the vision condition ($M=5.27$, $SD=1.13$) had significantly higher mental imagery scores compared to participants in the superordinate goal condition ($M=4.61$, $SD=1.33$), $t(447)=5.68$, $p<.001$.

Hypotheses tests

Descriptive statistics of all variables are shown in Table 1. Table 2 shows their zero-order correlations. We again found support for hypothesis 1 in that the visions group reported higher positive affect than the superordinate goal group ($a=0.50$, $p<.001$, 95% CI [0.40, 0.61]), and in turn predicted positive anticipatory affect ($b=0.35$, $p<.001$, 95% CI [0.20, 0.49]) which is in support of hypothesis 2. The biased-corrected bootstrap confidence interval (based on 5000 samples) for the indirect effect was significant ($ab=0.18$, 95% CI [0.09, 0.27]).

We then examined the significance levels of the indirect effects for the hypothesized model using the bootstrap procedure (Hayes, 2022). Supporting hypothesis 3, there was a significant indirect effect of visions on goal commitment through positive affect and positive anticipatory affect (indirect effect= $\beta=0.017$, $SE=0.009$, 95% CI [0.003, 0.039]), operating sequentially. Specifically, visions significantly and positively predicted positive affect, positive affect significantly and positively predicted positive anticipatory affect, and positive anticipatory affect significantly and positively predicted goal commitment (for standardized path coefficients, see Fig. 3). Ultimately, confirming hypothesis 4, the indirect effect of visions on goal progress was significant ($\beta=0.005$, $SE=0.003$, 95% CI [0.001, 0.016]). The results showed that visions significantly and positively predicted positive affect, positive affect significantly and positively predicted positive anticipatory affect, positive goal-related affect significantly and positively predicted

goal commitment, and goal commitment significantly and positively predicted goal progress (for standardized path coefficients, see Fig. 3).

Discussion

First, the results of Study 2 replicated Study 1. They provided additional support for the proposition that visions evoke more positive affect than a control group (superordinate goals). We additionally provided supplemental evidence that shows that visions are positively associated with positive anticipatory affect, which is mediated by positive affect. We, therefore, provided further evidence for a central claim of our model, namely, visions are positively associated with positive affective reactions, which can spill over to goals derived from the vision. This finding offers a first important clue that visions ignite their motivational effect by affectively charging goals that work towards the vision. We were able to further strengthen this finding by showing that, in addition to positive anticipatory affect, as an indicator of approach motivation, the latter was associated with goal commitment, which led to increased goal progress. Thus, our results illustrate the first empirical evidence for the notion that visions are motivationally effective because they evoke positive affective reactions which increases the motivation for vision-related behaviors.

General discussion

Although management scholars agree that visions are an important tool for motivating employees and inspiring change (Carton & Lucas, 2018; Kohles et al., 2012), the processes by which visions motivate behavior remain unclear (Paine et al., 2023; Venus, Stam et al., 2019). The aim of the current study was to better understand the motivational mechanisms by which visions stimulate and drive behavior. In doing so, we respond to recent calls in the literature for a better understanding of the mediating processes of visions effectiveness (Fan et al., 2022), particularly the role of positive affect (Paine et al., 2023). By integrating findings from research on mental imagery (e.g., Schubert et al., 2020) and organizational research on visions (e.g., Carton & Lucas, 2018), we show that visions elicit positive affect. Drawing on goal systems theory (Fishbach & Woolley, 2022; Kruglanski et al., 2018), which suggests that emotional properties of goals can be transferred to one another, we propose

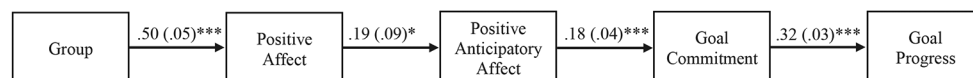


Fig. 3 Parameter estimates for the proposed model. The first value represents the standardized path estimate; the second value (within parentheses) represents the standard error. *Note.* Group was coded as 0 = superordinate goal and 1 = vision. * $p<.05$, ** $p<.01$

that positive affect evoked by visions spills over to vision-derived goals, which in turn facilitates more successful goal pursuit. In doing so, we answer the call for an empirical investigation and integration of visions and goals (Southwick et al., 2019; Berson et al., 2015) by using Stam et al.'s (2014, p. 1174) theoretical framework, which conceptualizes vision pursuit as all "goal-directed actions that are hierarchically related to the vision." Study 1 was designed to test the proposed motivational mechanism by which visions evoke positive affect and its subsequent transfer to related goals using a diverse sample of consultants and business students. Building on these central findings, Study 2 aimed to replicate and extend these results by examining the downstream behavioral consequences of vision-evoked positive affect in a time-lagged design. In Study 1, we found that visions evoked more positive affect compared to superordinate goals, and that vision-evoked positive affect mediated the effect of visions on positive anticipatory affect. In Study 2, we not only replicated, but also extended the findings of Study 1. Specifically, we found that visions were positively related to goal progress two weeks later through positive affect, positive anticipatory affect, and goal commitment.

Theoretical implications

The above findings contribute to the literature in multiple ways. First, and most importantly, our research provides insight into the process of visions motivational effect. Scholars have noted that "empirical evidence pertaining to the antecedents and consequences of visions remains fragmented and scarce" (Boyatzis et al., 2015, p.1; see also Strauss et al., 2012; Venus, Johnson et al., 2019; and that the processes by which visions motivate behavior are still "ill-understood" (Venus, Stam et al., 2019, p. 681). In this regard, Kearney et al. (2019) argue that when visions are reduced to merely communicating an image of the future "there is surprisingly little empirical research on how it affects outcomes" (p. 3). Our research indicates that visions evoke positive affect, taking together findings from clinical psychology (e.g., Schubert et al., 2020) and organizational scholars (Fiset & Boies, 2019; Naidoo & Lord, 2008). As such, our findings complement the results of previous research that highlighted the role of imagery in visions (Carton & Lucas, 2018; Masuda et al., 2010) by revealing the ability of visions to evoke positive affect, as a possible underlying mechanism of the effectiveness of imagery in visions (see Rawolle et al., 2017). By doing so, we respond to the recent call by Paine et al. (2023), and advance the understanding of positive affect as a key mediating mechanism in how visions influence motivation and behavior. Developing a vision and imagining it in vivid imagery evokes positive emotions associated with the anticipation

of realizing that vision. This positive response is transferred to the current emotional state, giving the vision a positive valence. In doing so, our research not only demonstrates the potential motivational impact of a simple "vision intervention," but also builds on research on *future work selves* that has encouraged future researchers to address the effect of future imagery on "affective outcomes" (Strauss et al., 2012, p. 594).

Second, we contribute to research on visions by examining how visions relate to goals that are hierarchically related to them. While scholars have repeatedly called for the integration of research on visions and goals (Berson et al., 2015) and suggested that visions need to be translated into actionable and specific goals (Carton & Lucas, 2018; Stam et al., 2014), to our knowledge, studies have not yet empirically explored this question. Drawing on work on emotional transfer in goal systems theory (Fishbach & Woolley, 2022; Kruglanski et al., 2018); Stam et al., 2014, p. 1174) theoretical framework, which conceptualizes vision pursuit as all "goal-directed actions that are hierarchically related to the vision," we examined (a) whether vision-evoked positive affect spills over to vision-derived goals and (b) whether these affectively charged vision-derived goals benefit from increased commitment and goal progress. We demonstrated that positive affect associated with a vision spills over to a vision-derived goal enhancing the pursuit of these goals and thereby actualizing the pursuit of the vision (Stam et al., 2014). Although the exact mechanism by which visions facilitate this affective spillover requires future research, our studies suggest a potential mechanism by which visions unleash their motivational effects. By further investigating how vision-derived goals are affectively charged, but people also seem to pursue them more vigorously, we offer a novel perspective in vision research. Although some research has found that bringing a positive future to one's mind leads only to moderate goal commitment (for a review see Oettingen, 2012) the present studies have shown that visions and vision-evoked positive affect stimulate goal pursuit. In line with research showing that images of a desired future foster proactivity (e.g. Strauss et al., 2012), we argue that a vision can illustrate an existing discrepancy between the positive future and the status quo.

Third, we contribute to the research by examining the effect of visions at the individual behavioral level. Although scholars have argued that visions are individual-level cognitions (Stam et al., 2014) that begin at the individual level by motivating and influencing a person's behavior (Kehr et al., 2021), most previous research has examined the effects of visions at the collective level (e.g., Kipfelsberger et al., 2022), attempting to explain how a firm's organizational vision motivates followers. Building on theorists (Fiset & Robinson, 2020) who speculate that individual-level visions

may be an important factor in career development, our study provides new insights into how individual visions may be an important tool that can help individuals to pursue career-related goals, and thus their own careers. Moreover, a better understanding of such individual-level visions may be particularly important given recent scholarly emphasis on the importance of organizations considering their employees' individual visions (Preller et al., 2020) and increasing employees' personal connection to the vision (Carton, 2022).

Practical implications

Our research has several practical implications. Our results demonstrate the importance of visions as an effective tool in motivating individual behavior. Visions, which are high in mental imagery, evoke positive affect, which affectively charges related goals, ultimately fostering goal pursuit. Even though visions were only examined at the individual level, according to research by Stam and colleagues (2014) we can assume that visions have practically relevant collective effects as well.

On an individual level, personal visions could serve as an integral part of career management practices, for example, career counseling. Importantly, our findings imply that the vision-derived goals are only affectively charged to the extent that the vision itself leads to affective reactions. Based on our research, interventions can help individuals set personal visions that affectively resonate with them and thereby support them in their goal pursuit. For example, companies could integrate interventions in formal career management practices, career development, training opportunities, or coaching and mentoring to help employees foster personal visions that might positively affect their work-related behavior. Leaders might have an especially essential role in helping their employees to develop motivationally compelling personal visions. Research has shown that leaders have a profound impact on the way employees see themselves (Avolio et al., 2004). Therefore, if leaders demonstrate that they have high expectations and confidence in the abilities and potential of their employees, they could potentially inspire and promote personal visions (Avolio et al., 2004).

Secondly, and in addition to the individual level, our research findings also provide clues for the pursuit of corporate visions, that is, for a company's strategic orientation. Visions are often used in everyday corporate life to derive goals, which employees work towards. However, if the corporate vision does not evoke positive affect among employees this could also harm the pursuit of personal work goals. For example, because it is communicated in a rather abstract and less pictorial manner (Carton & Lucas, 2018; Emrich et al., 2001). Leaders could therefore bear a distinctive

responsibility to assist their employees. Therefore, managers should evaluate how the vision triggers positive affective reactions among employees. If the positive affective response in employees are weak, leaders could reframe the vision in more vivid image-based language (Carton & Lucas, 2018; Kehr et al., 2021) to evoke more positive affective reactions in employees.

Limitations and future directions

Although the cross-lagged design of Study 2 enables us to overcome shortcomings of previous studies examining visions which relied on cross-sectional data (e.g. Carton & Lucas, 2018; Masuda et al., 2010; Naidoo & Lord, 2008) we only used one additional measurement point, two weeks after the initial survey. Taking into account that scholars postulate that visions ultimately motivate vision-pursuit "over long periods of time" (Stam et al., 2014, p. 1174, see also Kirkpatrick & Locke, 1996), future studies should measure the goal-related variables (positive anticipatory affect, commitment, and goal progress) multiple times at regular intervals over a more extended period. Such designs could be used to examine whether the influence of a vision on the pursuit of goals derived from it remains constant. In addition, individuals in each experimental condition could be reminded of their vision or goal between days of data collection to investigate if this affects their pursuit of the goal.

Second, common-method bias might pose a possible issue as we solely used self-reported measures in these studies. Because both our studies used an experimental design, comparing two different interventions, we controlled for some of the problems of self-reported behaviors (Cooper et al., 2020). Moreover, by using different scale points, we further mitigated the risk of common method bias (Jordan & Troth, 2020). Nevertheless, we advise that future research uses more rigorously designed longitudinal studies to temporally separate the measurement of mediators and dependent variables (Cooper et al., 2020). Future studies could also obtain multi-source data by assessing objective indicators of goal-related behavior (e.g., grades, workload, etc.).

Third, a potential limitation of our research is its focus on individual-level visions, which may differ from organizational visions, which are typically characterized by their imposed nature. Nevertheless, prior research suggests that our findings may be applicable to organizational contexts, as individuals often align with goals that reflect their intrinsic values, even when they are externally imposed (Barrick et al., 2013; Sheldon et al., 2015). However, future research should examine the extent to which our findings are applicable to organizational-level visions. In addition, and relatedly, we did not examine the conditions under which visions elicit mental imagery and evoke positive affect. We recommend

further research to examine possible interindividual differences that might moderate the relationship between visions and positive affect. For example, one might expect that the degree to which a vision is perceived as self-concordant (i.e., better representing people's implicit personality preferences and potentials, see Sheldon, 2014) would moderate the relationship between visions and positive affect. One could argue that only self-concordant visions would lead to mental imagery and positive affect, thereby facilitating the choice of more motive-congruent goals (Sheldon, 2014). Specifically, it may be that a vision that successfully elicits mental imagery arouses implicit motives (Kehr et al., 2021). This leads to positive affective responses that can help us make motive-congruent decisions by linking our goals to our implicit preferences (Kehr et al., 2021).

Last, we acknowledge that the student sample of Study 2 may limit the generalizability of our findings. The rationale for using business students was that investigating visions in the context of professional future visions is highly relevant for business students given their stage of career planning (e.g., Taber & Blankemeyer, 2015). Moreover, these limitations do not apply to the first study, which used a mixed sample of business students and full-time employees from two medium-sized consulting firms. Nevertheless, we encourage future researchers to explore these concepts with more diverse populations, including a broader range of professionals from different industries, to further validate and extend our findings. This approach would provide a more comprehensive understanding of the impact of visions in different professional contexts.

Conclusion

The purpose of our paper was, first, to investigate the relationship between visions and positive affect, second, to examine the extent to which positive affect spills over from the vision to goals derived from it, and third to analyze how this affects the pursuit of these goals. We showed that visions are positively associated with goal progress of a derived goal via positive affect, positive anticipatory affect, and goal commitment. We hope that our integration of research on visions and goals provides new insights and opens new avenues for future research.

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Data availability The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethical approval The procedures for human participants involved in this study are consistent with the ethical standards of the authors' institution.

Informed consent Informed consent was obtained from all participants included in the study.

Conflict of interest The authors have no conflicts of interest to declare that are relevant to the content of this article.

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References

- Aarts, H., Custers, R., & Marien, H. (2008). Preparing and motivating behavior outside of awareness. *Science*, *319*(5870), 16–39. <https://doi.org/10.1126/science.1150432>.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly*, *15*(6), 801–823. <https://doi.org/10.1016/j.leaqua.2004.09.003>.
- Bagozzi, R. P., Baumgartner, H., & Pieters, R. (1998). Goal-directed emotions. *Cognition and Emotion*, *12*(1), 1–26. <https://doi.org/10.1080/026999398379754>.
- Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of Purposeful Work Behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review*, *38*(1), 132–153. <https://doi.org/10.5465/amr.2010.0479>.
- Baum, J. R., Locke, E. A., & Kirkpatrick, S. A. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, *83*(1), 43–54. <https://doi.org/10.1037/0021-9010.83.1.43>.
- Baumgartner, H., Pieters, R., & Bagozzi, R. P. (2008). Future-oriented emotions: Conceptualization and behavioral effects. *European Journal of Social Psychology*, *38*(4), 685–696. <https://doi.org/10.1002/ejsp.467>.
- Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, *37*(2), 157–167. <https://doi.org/10.1002/job.2053>.
- Berson, Y., Halevy, N., Shamir, B., & Erez, M. (2015). Leading from different psychological distances: A construal-level perspective on vision communication, goal setting, and follower motivation.

- Leadership Quarterly*, 26(2), 143–155. <https://doi.org/10.1016/j.leaqua.2014.07.011>.
- Boyatzis, R. E., Rochford, K., & Taylor, S. N. (2015). The role of the positive emotional attractor in vision and shared vision: Toward effective leadership, relationships, and engagement. *Frontiers in Psychology*, 6, Article 670. <https://doi.org/10.3389/fpsyg.2015.00670>.
- Carton, A. M. (2022). The Science of Leadership: A theoretical model and research agenda. *Annual Review of Organizational Psychology and Organizational Behavior*, 9(1), 61–93. <https://doi.org/10.1146/annurev-orgpsych-012420-091227>.
- Carton, A. M., & Lucas, B. J. (2018). How can leaders overcome the blurry vision bias? Identifying an antidote to the paradox of vision communication. *Academy of Management Journal*, 61(6), 2106–2129. <https://doi.org/10.5465/amj.2015.0375>.
- Chitraranjan, C., & Botenne, C. (2023). Association between anticipated affect and behavioral intention: A meta-analysis. *Current Psychology*, 1–14. <https://doi.org/10.1007/s12144-023-04383-w>.
- Cooper, B., Eva, N., Fazlelahi, Z., Newman, F., Lee, A., A., & Obschonka, M. (2020). Addressing common method variance and endogeneity in vocational behavior research: A review of the literature and suggestions for future research. *Journal of Vocational Behavior*, 121, 103472. <https://doi.org/10.1016/j.jvb.2020.103472>.
- Custers, R., & Aarts, H. (2005). Positive affect as implicit motivator: On the nonconscious operation of behavioral goals. *Journal of Personality and Social Psychology*, 89(2), 129–142. <https://doi.org/10.1037/0022-3514.89.2.129>.
- Ding, Y. (2019). Looking forward: The role of hope in information system continuance. *Computers in Human Behavior*, 91, 127–137. <https://doi.org/10.1016/j.chb.2018.09.002>.
- Emrich, C. G., Brower, H. H., Feldman, J. M., & Garland, H. (2001). Images in words: Presidential rhetoric, charisma, and greatness. *Administrative Science Quarterly*, 46(3), 527–557. <https://doi.org/10.2307/3094874>.
- Fan, X. L., van Knippenberg, D., & Wang, X. H. (2022). (Frank). Vision–value match: leader communication of visions, follower values, meaningfulness, and creativity. *European Journal of Work and Organizational Psychology*, 31(4), 550–566. <https://doi.org/10.1080/1359432X.2021.2013202>.
- Fiset, J., & Boies, K. (2019). Positively vivid visions: Making followers feel capable and happy. *Human Relations*, 72(10), 1651–1670. <https://doi.org/10.1177/0018726718810105>.
- Fiset, J., & Robinson, M. A. (2020). Developing foresight through the evaluation and construction of vision statements: An experiential exercise. *Organization Management Journal*, 17(2), 99–115. <https://doi.org/10.1108/OMJ-03-2019-0822>.
- Fishbach, A., & Woolley, K. (2022). The structure of intrinsic motivation. *Annual Review of Organizational Psychology and Organizational Behavior*, 9, 339–363. <https://doi.org/10.1146/annurev-orgpsych-012420-091122>.
- Fishbach, A., Shah, J. Y., & Kruglanski, A. W. (2004). Emotional transfer in goal systems. *Journal of Experimental Social Psychology*, 40(6), 723–738. <https://doi.org/10.1016/j.jesp.2004.04.001>.
- Fishbach, A., Eyal, T., & Finkelstein, S. R. (2010). How positive and negative feedback motivate goal pursuit. *Social and Personality Psychology Compass*, 4(8), 517–530. <https://doi.org/10.1111/j.1751-9004.2010.00285.x>.
- Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: The case for emotional intensity. *Journal of Personality and Social Psychology*, 61(3), 427–434. <https://doi.org/10.1037//0022-3514.61.3.427>.
- Greguras, G. J., & Diefendorff, J. M. (2010). Why does proactive personality predict employee life satisfaction and work behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology*, 63(3), 539–560. <https://doi.org/10.1111/j.1744-6570.2010.01180.x>.
- Harvey, P., & Victoravich, L. M. (2009). The influence of forward-looking antecedents, uncertainty, and anticipatory emotions on project escalation. *Decision Sciences*, 40(4), 759–782. <https://doi.org/10.1111/j.1540-5915.2009.00250.x>.
- Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and conditional process analysis* (3rd ed.). Guilford Press.
- Holmes, E. A., Blackwell, S. E., Burnett Heyes, S., Renner, F., & Raes, F. (2016). Mental Imagery in Depression: Phenomenology, potential mechanisms, and treatment implications. *Annual Review of Clinical Psychology*, 12(1), 249–280. <https://doi.org/10.1146/annurev-clinpsy-021815-092925>.
- Holtschlag, C., Masuda, A. D., Reiche, B. S., & Morales, C. (2020). Why do millennials stay in their jobs? The roles of protean career orientation, goal progress and organizational career management. *Journal of Vocational Behavior*, 118, 103366. <https://doi.org/10.1016/j.jvb.2019.103366>.
- Hülshager, 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>.
- IBM Corp. (2019). IBM SPSS Statistics for Windows (Version 26.0) [Computer software]. IBM Corp.
- Jordan, P. J., & Troth, A. C. (2020). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management*, 45(1), 3–14. <https://doi.org/10.1177/0312896219871976>.
- Kearney, E., Shemla, M., van Knippenberg, D., & Scholz, F. A. (2019). A paradox perspective on the interactive effects of visionary and empowering leadership. *Organizational Behavior and Human Decision Processes*, 155, 20–30. <https://doi.org/10.1016/j.obhdp.2019.01.001>.
- Kehr, H. M., Voigt, J., & Rawolle, M. (2021). Implicit motives as the missing link between visionary leadership, approach and avoidance motivation, and vision pursuit. *Organizational Psychology Review*, 12(2), 1–27. <https://doi.org/10.1177/20413866211061364>.
- Kipfelsberger, P., Raes, A., Herhausen, D., Kark, R., & Bruch, H. (2022). Start with why: The transfer of work meaningfulness from leaders to followers and the role of dyadic tenure. *Journal of Organizational Behavior*, 43(8), 1287–1309. <https://doi.org/10.1002/job.2649>.
- Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81(1), 36–51. <https://doi.org/10.1037/0021-9010.81.1.36>.
- Klein, H. J., Wesson, M. J., Hollenbeck, J. R., Wright, P. M., & DeShon, R. P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and Human Decision Processes*, 85(1), 32–55. <https://doi.org/10.1006/obhd.2000.2931>.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Kohles, J. C., Blish, M. C., & Carsten, M. K. (2012). A follower-centric approach to the vision integration process. *The Leadership Quarterly*, 23(3), 476–487. <https://doi.org/10.1016/j.leaqua.2011.12.002>.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 34 (pp. 331–378). Academic Press. [https://doi.org/10.1016/S0065-2601\(02\)80008-9](https://doi.org/10.1016/S0065-2601(02)80008-9).
- Kruglanski, A. W., Fishbach, A., Woolley, K., Bélanger, J. J., Chernikova, M., Molinario, E., & Pierro, A. (2018). A structural

- model of intrinsic motivation: On the psychology of means-ends fusion. *Psychological Review*, 125(2), 165–182. <https://doi.org/10.1037/rev0000095>.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.
- Masuda, A. D., Kane, T. D., Shoptaugh, C. F., & Minor, K. A. (2010). The role of a vivid and challenging personal vision in goal hierarchies. *Journal of Psychology: Interdisciplinary and Applied*, 144(3), 221–242. <https://doi.org/10.1080/00223980903472235>.
- Monzani, D., Steca, P., Greco, A., D'Addario, M., Pancani, L., & Cappelletti, E. (2015). Effective pursuit of personal goals: The fostering effect of dispositional optimism on goal commitment and goal progress. *Personality and Individual Differences*, 82, 203–214. <https://doi.org/10.1016/j.paid.2015.03.019>.
- Naidoo, L. J., & Lord, R. G. (2008). Speech imagery and perceptions of charisma: The mediating role of positive affect. *Leadership Quarterly*, 19(3), 283–296. <https://doi.org/10.1016/j.leaqua.2008.03.010>.
- Oettingen, G. (2012). Future thought and behaviour change. *European Review of Social Psychology*, 23(1), 1–63. <https://doi.org/10.1080/10463283.2011.643698>.
- Oyserman, D., & Horowitz, E. (2023). From possible selves and future selves to current action: An integrated review and identity-based motivation synthesis. In A. J. Elliot (Ed.), *Advances in Motivation Science* (Vol. 10, pp. 73–147). Elsevier. <https://doi.org/10.1016/bs.adms.2022.11.003>.
- Paine, J. W., Byron, K., & Higgins, E. T. (2023). Does the vision fit? How change context construal and followers' regulatory focus influence responses to leader change visions. *Leadership Quarterly*, 6, 101718. <https://doi.org/10.1016/j.leaqua.2023.101718>.
- Pinquart, M. (2001). Age differences in perceived positive affect, negative affect, and affect balance in middle and old age. *Journal of Happiness Studies*, 2, 375–405. <https://doi.org/10.1023/A:1013938001116>.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>.
- Preller, R., Patzelt, H., & Breugst, N. (2020). Entrepreneurial visions in founding teams: Conceptualization, emergence, and effects on opportunity development. *Journal of Business Venturing*, 35(2), 105914. <https://doi.org/10.1016/j.jbusvent.2018.11.004>.
- R Development Core Team. (2013). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria.
- Rafieian, H., & Sharif, M. A. (2022). It's the effort that counts: The effect of self-control on goal progress perceptions. *Journal of Marketing Research*, 60(3), 527–542. <https://doi.org/10.1177/00222437221123969>.
- Rawolle, M., Schultheiss, O. C., Strasser, A., & Kehr, H. M. (2017). The Motivating Power of Visionary images: Effects on Motivation, affect, and Behavior. *Journal of Personality*, 85(6), 769–781. <https://doi.org/10.1111/jopy.12285>.
- Schubert, T., Eloo, R., Scharfen, J., & Morina, N. (2020). How imagining personal future scenarios influences affect: Systematic review and meta-analysis. *Clinical Psychology Review*, 75., Article 101811. <https://doi.org/10.1016/j.cpr.2019.101811>.
- Schwarz, N. (2012). Feelings-as-information theory. In Van P. A. M. Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 289–308). Sage Publications Ltd. <https://doi.org/10.4135/9781446249215.n15>.
- Sheldon, K. M. (2014). Becoming oneself: The central role of self-concordant goal selection. *Personality and Social Psychology Review*, 18(4), 349–365. <https://doi.org/10.1177/1088868314538549>.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology*, 1(2), 73–82. <https://doi.org/10.1080/17439760500510676>.
- Sheldon, K. M., Prentice, M., Halusic, M., & Schüler, J. (2015). Matches between assigned goal-types and both implicit and explicit motive dispositions predict goal self-concordance. *Motivation and Emotion*, 39(3), 335–343. <https://doi.org/10.1007/s11031-014-9468-4>.
- Southwick, D. A., Tsay, C. J., & Duckworth, A. L. (2019). Grit at work. *Research in Organizational Behavior*, 39, 100126. <https://doi.org/10.1016/j.riob.2020.100126>.
- Stam, D. A., Lord, R. G., van Knippenberg, D., & Wisse, B. (2014). An image of who we might become: Vision communication, possible selves, and vision pursuit. *Organization Science*, 25(4), 1172–1194. <https://doi.org/10.1287/orsc.2013.0891>.
- Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology*, 97(3), 580–598. <https://doi.org/10.1037/a0026423>.
- Taber, B. J., & Blankemeyer, M. (2015). Future work self and career adaptability in the prediction of proactive career behaviors. *Journal of Vocational Behavior*, 86, 20–27. <https://doi.org/10.1016/j.jvb.2014.10.005>.
- van Breukelen, G. J. P. (2013). ANCOVA versus CHANGE from baseline in Nonrandomized studies: The difference. *Multivariate Behavioral Research*, 48(6), 895–922. <https://doi.org/10.1080/00273171.2013.831743>.
- Venus, M., Stam, D., & Van Knippenberg, D. (2019). Visions of change as visions of continuity. *Academy of Management Journal*, 62(3), 667–690. <https://doi.org/10.5465/amj.2015.1196>.
- Venus, M., Johnson, R. E., Zhang, S., Wang, X. H., Frank, & Lanaj, K. (2019). Seeing the big picture: A within-person examination of Leader Construal Level and Vision Communication. *Journal of Management*, 45(7), 2666–2684. <https://doi.org/10.1177/0149206318761576>.
- Ward, M. K., & Meade, A. W. (2022). Dealing with Careless responding in Survey Data: Prevention, Identification, and recommended best practices. *Annual Review of Psychology*, 74(1), 577–596. <https://doi.org/10.1146/annurev-psych-040422-045007>.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037//0022-3514.54.6.1063>.
- Woolley, K., & Fishbach, A. (2023). The means-ends Fusion Model of intrinsic motivation. In A. W. Kruglanski, A. Fishbach, & C. Kopetz (Eds.), *Goal systems Theory: Psychological processes and applications* (1st ed., pp. 55–76). Oxford University Press. <https://doi.org/10.1093/oso/9780197687468.001.0001>.