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When More is More: Do Non-Restricted Goals Benefit Employers and the Environment Too?

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Abstract. Prior research on goal self-concordance (GSC) and goal attainment (GA) has studied these dimensions as transversal sections through a person's life domains. Blending the recent developments in self-determination theory and pro-environmental behavior literature, the current study introduced the concept of non-restricted goals and explored whether work climate (WCQ) and environmental identity (EID) impact GA and, through it, in-role job performance (IRB), organizational citizenship behaviors (OCB) and wellbeing, as well as organizational citizenship behaviors for the environment (OCBE). It also explored GSC along with basic psychological needs' satisfaction (BPNS) and GA, as explanatory mechanisms. The study relied on data collected at two different moments in time, with a retained sample of 201 employees from different organizations. Results confirmed that WCQ and EID are relevant antecedents for IRB, OCB and wellbeing, as well as OCBE. Except for the direct relationship between EID and OCB/OCBE, most of these impacts were indirect, through BPNS, GSC or GA. The current study did not find a significant relationship between GSC and GA, adding to the line of mixed results regarding their relationship. The findings inform pro-environmental interventions in the workplace, as well as human resource management practices that foster employee wellbeing, work-life balance, and job performance.

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Despite the long-standing recognition that work and nonwork domains can interact with each other (Binnewies et al., 2009; Geurts & Demerouti, 2002; Ilies et al., 2007; Kabanoff, 1980), as well as the early call for consistent research to "focus on how people actually balance needs, aspirations and satisfactions across life spheres" (Geurts & Demerouti, 2002, p. 283), the study of goal self-concordance and goal attainment across work and nonwork domains is scarce and has so far only made the journey from proactive personality, through work-specific goals, to work outcomes (i.e., job performance and organizational citizenship behavior) and non-work outcomes (i.e., life satisfaction)(Greguras & Diefendorff, 2010). By contrast, the current study explores the potential benefits of goals this time not restricted to work for employees as individuals (i.e., wellbeing), as well as for their employing organizations (i.e., in-role performance and organizational citizenship behavior) and for the environment at large (i.e., organizational citizenship behavior for the environment).

The topic of work-life blending is more relevant than ever, now that boundaries between the work and nonwork domains of life become less and less discernible. In the US alone, a quantitative review estimated that every year over 120,000 deaths and five to eight percent of healthcare costs may be attributable to workplace stressors and practices (Goh et al., 2016). Simultaneously, "bring your full self to work" has become a popular catchphrase in employer communication. But, do individuals' goal attainment (GA) also benefit their organizations, not just their own wellbeing?

An evolving line of research with applicability in goal, work-life and pro-environmental research explores the goal self-concordance (GSC) model. Empirical studies on GSC have so far studied these dimensions as transversal sections through a person's life domains or social roles. That is, for the work domain, the links between attaining work goals and job satisfaction have already been studied (Bono & Judge, 2003). So were the links

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between personal goals and their attainment (Sheldon & Elliot, 1998), as well as between characteristics of personal goals and their corresponding level of GA (Sheldon & Kasser, 1998).

For the purpose of this study, non-restricted goals are defined to be goals that are not confined to any specific life domain or social role, therefore goals that a person selects without being asked to choose from within a specific life domain (e.g., work, school or personal) or a specific social role (e.g., parent, student, employee). Employing the principles of self-determination theory (SDT) and of the self-concordance model also derived from SDT, this study addresses the question of whether potential benefits of GSC and GA could extend not only to an individual's wellbeing but also to the organizations in which they are active (as captured through in-role and extra-role performance outcomes and including organizational citizenship behavior as one such form of extra-role performance, one of increased interest for employees and organizations alike). To this end, we hypothesize that non-restricted goals (more specifically, their levels of self-concordance and of attainment) will have a positive impact on job performance subdimensions and on wellbeing. In exploring this hypothesis, in addition to the theoretical perspectives on self-determination and self-concordance, we build upon previous empirical results (Bono & Judge, 2003; De Cooman et al., 2013; Deci & Ryan, 2000, 2008; Greguras & Diefendorff, 2010; Judge et al., 2005; Sheldon & Elliot, 1998, 1999).

Self-Determination Theory applied to Goals and Work Settings

The state of science on self-determination macro-theory applied to work settings was summarized by Deci et al. (2017) in a paper that harmonized existing SDT theories and empirical findings. Their proposed framework largely serves as the theoretical foundation of the current study. Their framework included a number of independent variables (workplace context variables such as need supporting and need thwarting, as well as individual differences variables such as causality orientations along with aspirations and goals), a number of mediators (the basic psychological needs of autonomy, competence and relatedness, as well as autonomous versus controlled motivations), and a number of outcomes (employee performance in quantitative and qualitative terms, as well as health and wellness, as reflected in aspects such as wellbeing, vitality and ill-being).

Of central importance to the above framework (and the current study) are the different types of motivation (autonomous versus controlled, with their subtypes forming an autonomy continuum) and the very different impacts they have in activating outcomes related to job performance as well as health and wellness (Deci et al., 2017; Deci & Ryan, 2008; Sheldon et al., 2003). Additionally, the goal contents sub-theory of SDT emphasizes the idea that, unlike intrinsic goals, extrinsic goals are linked with lower wellness and higher ill-being. The SDT literature also recognizes that apart from the goal contents (extrinsic vs. intrinsic), the motives for goal pursuit (autonomous vs. controlled) were shown to independently relate to wellbeing in at least three dedicated studies (Sheldon et al., 2004).

While various empirical studies previously applied the SDT theory to work, sports, or education settings, the current study, is, to our knowledge, the first one to specifically test the integrative conceptual architecture proposed by Deci et al. (2017) by considering variables from each of the model's clusters of variables – that is, individual and contextual antecedents (work climate [WCQ] and environmental identity [EID]), both mediators (basic psychological needs' satisfaction [BPNS] and GSC to capture the differences in autonomous versus controlled motivations), and variables from the two outcome categories (namely, well-being from the health and wellness category; in-role job performance [IRB], organizational citizenship behaviors [OCB], as well as organizational citizenship behaviors for the environment [OCBE], as outcomes from the work behaviors category). Past studies typically explored one or the other mediator (Deci et al., 2017). In the current study, we maintain both the variables related to need satisfaction (in the form of BPNS) and to motivations (in the adapted form of GSC) as mediators, while adding from the goal theory literature goal attainment as an intermediary outcome that further predicts the final outcomes.

The Self-Concordance Model as a "Varietal" of SDT

The self-concordance model (Sheldon & Elliot, 1999), a derivate of SDT, encompasses different steps that break down the advancement of a goal from the stage of being identified to being pursued (through sustained effort), to then being attained. The self-concordance theory also considers the impact GA can then have on a person's wellbeing. The extent to which that initial goal choice is reflective of that person's values and interests is defined as GSC and deemed to play a crucial part in the way the rest of the GA process unfolds.

The self-concordance model posits that there are different degrees to which a person feels ownership of a goal and has integrated that goal (Sheldon & Elliot, 1999). In turn, this self-concordance of goals relates to both level of effort invested in achieving the goal several weeks after and to the level of GA at end of the study (Sheldon & Elliot, 1999). Importantly, in a meta-analytical review of

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11 studies, individuals with high autonomous motivations were more likely to achieve their goals or to make progress on them (Koestner et al., 2008). Even though GSC is operationalized as the difference between autonomous and controlled motivations and expected to even better capture the contrasting impact of these two types of motivation, several studies, some subsequent to the above mentioned meta-analysis, did not find the expected significant, positive relationship between GSC and GA (Greguras & Diefendorff, 2010; Judge et al., 2005; van Dierendonck, 2015).

In terms of antecedents, the self-concordance model has been previously adapted to consider individual difference antecedents such as transformation leadership (Bono & Judge, 2003; Greguras & Diefendorff, 2010), proactive personality (Greguras & Diefendorff, 2010) or core self-evaluations (Judge et al., 2005). The following section discusses why we have chosen to employ environmental identity (EID) as a new individual difference antecedent.

Grafting Environmental Identity onto SDT and Self-Concordance

Interventions aimed at encouraging pro-environmental behaviors through the self-concordance mechanism already exist (Unsworth & McNeill, 2016), yet they do not consider some potentially valuable antecedents that the broader SDT model includes. Understanding those antecedents preceding self-concordance could help in targeting future interventions (e.g., to individuals or workplace contexts that are more likely to respond to them). A theoretical paper proposed the framing of messages aiming to encourage pro-environmental behaviors as serving intrinsic goals rather than extrinsic goals (Pelletier & Sharp, 2008) and a scale to measure motivation toward the environment has also been developed drawing on SDT (Pelletier et al., 1998). Another study highlighted the fact that, when compared to norm-based theories as well as social exchange based theories, SDT might better address the research gap of explaining the within-person variations in manifesting employee green behaviors (Norton et al., 2015). Nevertheless, the body of literature supporting the application of SDT in shaping pro-environmental behaviors is still sparse. Moreover, a meta-analytical review of pro-environmental behavior experiments highlighted goal setting as one of the most effective yet understudied treatments (Osbaldiston & Schott, 2012). The current study thus also adds up to the environmental literature. By improving the understanding of pathways leading to pro-environmental behaviors manifested in the workplace, through types of goal motivations and their attainment, the current study's results can also help in better designing future interventions on pro-environmental behaviors manifested in the workplace (organizational citizenship behaviors towards the environment [OCBE]).

The Present Study. Hypothesized Model

We have considered a model with the following specifications: WCQ at Time 1 and EID at Time 0 are unobserved variables; BPNS at Time 1 and GSC at Time 0 are mediators which also interact among themselves (GSC at Time 0 is an antecedent for BPNS at Time 1); GSC at Time 0 has EID at Time 0 as an antecedent; GA at Time 1 has GSC at Time 0 and WCQ at Time 1 as antecedents; the final outcomes of IRB at Time 1, OCB at Time 1, OCBE at Time 1 and Wellbeing at Time 1 are all impacted by GA at Time 1, BPNS at Time 1, WCQ at Time 1, GSC at Time 0 and EID at Time 0. All these relationships, as well as the indirect paths are shown in Figure 1.

Method

Participants

Participants were recruited using Prolific (March, 2021)[1]. Employing the platform's capabilities, the following criteria were used to select participants: Age was 18 or above, work status was employed, and country of residence was the US. The sampling method was non-probabilistic and the sample is neither representative of the overall population in the US nor of the population of employees in the US. Out of the first wave group of 297 participants, 201 also provided answers to the follow up questionnaire, resulting in a retention rate of 67.68%.

The initial sample comprised 52.86% male respondents, 46.80% female and one other participant who selected "Other/I choose not to answer". In the second wave there were 50.75% males and 48.76% females, along with the one participant who opted for "Other/I choose not to answer". Respondents' ages in the initial wave of responses ranged from 18 to 68 ($M = 31.95$; $SD = 10.20$), compared to a range of 18 to 67 ($M = 32.43$; $SD = 10.13$) in the second stage. About 93.03% of the second wave participants were still with the same employer at the time when Wave 2 data have been collected. The average time to complete the questionnaire from the first stage was 16 minutes and 35 seconds, with an average compensation of GBP 4.79 per hour. The average time to complete the second stage questionnaire was 20 minutes and 35 seconds, with an average compensation of GBP 7.60 per hour. Table 1 includes descriptive statistics of the sample by demographic characteristics.

[1]https://researcher-help.prolific.co/hc/en-gb.

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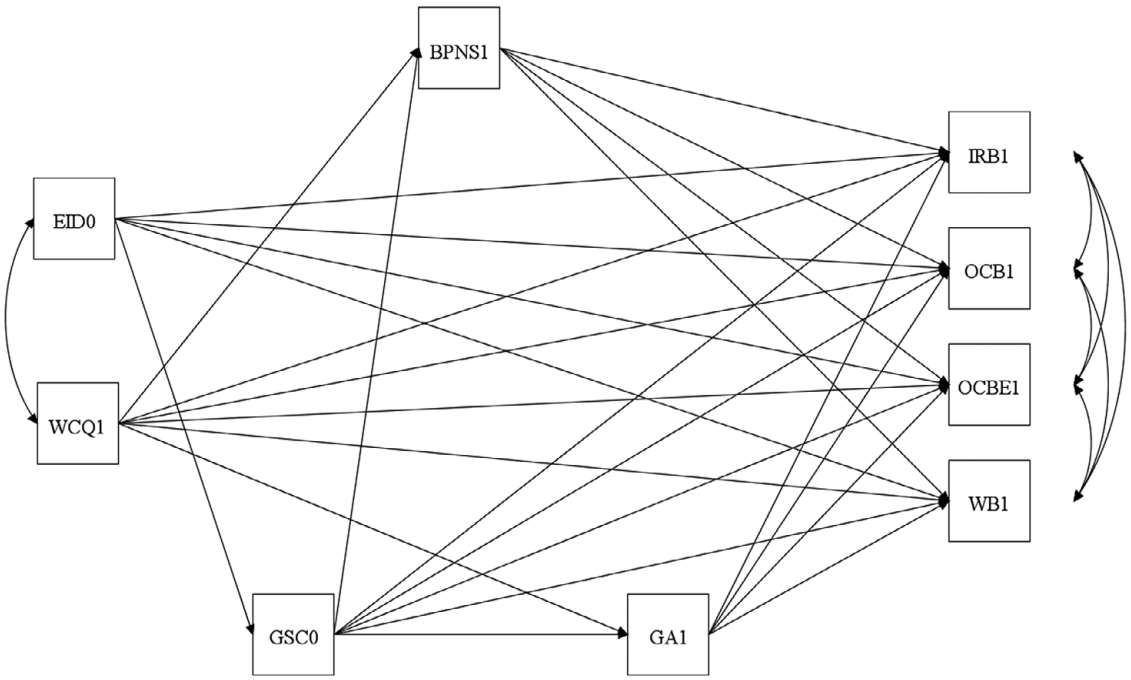

Figure 1. Hypothesized Model

Note. For variables measure in the first round of data collection, the label ends in 0, for those measured in the second round of data collection, the label ends in 1. The labels' meanings are as it follows: EID0 = environmental identity at T0; WCQ1 = work climate at T1; GSC0 = goal self-concordance at T0; BPNS1 = basic psychological needs at T1; GA1 = goal attainment at T1; IRB1 = in-role behavior at T1; OCB1 = organizational citizenship behavior at T1; OCBE1 = organizational citizenship behavior for the environment at T1; WB1 = Wellbeing at T1.

Following the suggestion of an anonymous reviewer, we compared the participants who took both the initial and the follow-up surveys with those who only took the initial survey, in terms of gender, age, GSC, and EID. A likelihood ratio test showed that the final sample did not significantly differ from the initial sample in regard to gender (p = .47). Independent t-tests showed that the final sample did not significantly differ from the initial sample in terms of age (p = .25), GSC (p = .99), or EID (p = .71).

Procedure

Data were collected through online questionnaires at two different points in time, approximately 90 days apart. The first round of data collection took place between November 25 and 26, 2018. The second round of data collection took place between March 3 and 8, 2019. The study received Board of Ethics approval from the authors' university, complying with informed consent, full anonymity and opt-out rights. Specifically, participants were presented with an informed consent form and monetary compensation has been provided even to those who opted out of completing the questionnaire once they have read the informed consent or later, while filling in their responses – this was done both for ethical reasons and to ensure that the quality of the data is not negatively impacted by participants being solely motivated by financial reasons (i.e., to avoid random answers).

The Prolific (ProA) platform was chosen based on a comparative study in which ProA fared better than CrowdFlower (CF) and MTurk:

> In two studies, we found that participants on both platforms were more naïve and less dishonest compared to MTurk participants. Across the three platforms, CF provided the best response rate, but CF participants failed more attention-check questions and did not reproduce known effects replicated on ProA and MTurk. Moreover, ProA participants produced data quality that was higher than CF's and comparable to MTurk's. ProA and CF participants were also much more diverse than participants from MTurk. (Peer et al., 2017, p. 153).

In addition, MTurk was shown to include more diverse participants, while being as valid as in-person data collection on campuses (Casler et al., 2013).

Measures

Work climate. Work climate was measured using the six-item scale version of the homonym questionnaire (Baard et al., 2004). The questionnaire is commonly used in SDT-based studies, in reference to general work

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Table 1. *Descriptive Statistics and Pearson Correlations for Study Variables*

Variable	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	201	32.43	10.13	–											
2. Gender[a]	200	0.51	0.50	−.05	–										
3. Employer[b]	201	0.93	0.26	.08	−.11	–									
4. WCQ	201	22.15	5.46	−.02	.06	.27**	–								
5. EID	201	73.11	18.80	.05	.03	.14*	.22**	–							
6. GSC	201	1.03	1.74	.11	.08	.13	.23**	.23**	–						
7. GA	201	80.68	18.29	−.23**	.20**	.13	.36**	.18*	−.01	–					
8. BPNS	201	73.90	12.42	.03	.08	.21**	.74**	.23**	.29**	.32**	–				
9. IRB	201	30.70	3.94	.03	−.08	.02	.26**	.05	.20**	.28**	.32**	–			
10. OCB	201	52.20	6.76	.05	.01	.11	.47**	.28**	.21**	.20**	.59**	.27**	–		
11. OCBE	201	26.10	9.60	−.08	.15*	.26**	.37**	.46**	.19**	.36**	.43**	.05	.47**	–	
12. Wellbeing	201	65.32	10.93	.03	.11	.10	.47**	.20**	.28**	.37**	.62**	.43**	.49**	.31**	–

Note. EID = environmental identity; WCQ = work climate; GSC = goal self-concordance; BPNS = basic psychological needs; GA = goal attainment; IRB = in-role behavior; OCB = organizational citizenship behavior; OCBE = organizational citizenship behavior for the environment.

[a]0 = female, 1 = male.

[b]0 = different employer since first data collection and 1 = same employer since first data collection.

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

climate or to specific work groups (e.g., the team's or the manager's support of employees' basic psychological needs, particularly that of autonomy) (Deci et al., 2017). A sample item is "My manager tries to understand how I see things before suggesting a new way to do things". Responses were evaluated on a 5-point scale, with scores then summed for each participant. The internal reliability of the selected scale when applied to our sample was very high (α = .91).

Environmental identity. Environmental identity was measured using a 22-item scale of environmental identity (Olivos & Aragonés, 2015). Sample items are "I spend a lot of time in natural settings (woods, mountains, desert, lakes, ocean)" and "In general, being part of the natural world is an important part of my self-image". Responses were captured on a 5-point scale. This scale also had very high internal reliability in our sample (α = .94).

Goal self-concordance. For the purpose of this study, we have employed the measurement procedure used by Bono and Judge (2003). Participants were first asked to enter 6 goals that they would aim to attain in the subsequent 60 days. For each of the goals they chose, the subsequent section of the questionnaire asked them to rate each of those goals on four items, using a 9-point scale. A sample item of those four goal rating items was "You choose this goal because somebody else wants you to or because the situation demands it". The four items represented two autonomous types of motivations and two controlled types of motivations. A GSC score was calculated for each participant by subtracting the controlled items' scores from the autonomous items' scores, then averaging the results of the subtraction for each of the initial six goals into a single score. Unlike in the study by Bono and Judge (2003), selecting job-related goals was not included as a prompt, to allow participants to select non-restricted goals. We followed this procedure as it was the one first used in a work context and also in line with that of Sheldon and Elliot (1998) in their foundational study on self-concordance, which in turn relied on the work of Emmons (1986). The internal reliability of this scale was adequate (α = .73).

Goal attainment. Goal attainment was measured employing the method previously used in workplace-oriented research by Judge et al. (2005), drawing on the work of Sheldon and Elliot (1999). Sample items included "I accomplished what I set out to do with this goal" and "I am happy with my progress toward attaining this goal". Responses were collected on 5-point scale and the internal reliability of the scale was high (α = .80).

Basic psychological needs satisfaction. For the purpose of the current study a 21-item scale measuring need satisfaction at work has been selected (Deci et al., 2001; Deci & Ryan, 2000; Ilardi et al., 1993; Kasser et al., 1992). Participants were prompted to consider their feelings towards their job during the past year or in case of tenure lower than a year, since employment. Using a 5-point scale, they rated items such as "Most days I feel a sense of accomplishment from working" or "On my job I do not get much of a chance to show how capable I am" (reversed). The three subscales corresponding to the three basic psychological needs from SDT (i.e., autonomy, competence and relatedness) have then been summed. The resulting scale's internal reliability was high (α = .87).

In-role behavior (IRB, task performance) and extra-role behaviors (OCB, organizational citizenship behavior). IRB and OCB were measured with a 7-item and 13-item scale, respectively (Williams & Anderson, 1991). Sample items are "I fulfill responsibilities specified in job description" (for IRB) and "I help others who have heavy workloads" (for OCB). For both of these measures, participants were presented with 5-point scales. The reliability of the IRB scale was high (α = .82) and so was that of the OCB scale (α = .78).

Organizational citizenship behavior towards the environment (OCBE). OCBE was measured with the 9-item scale developed by Boiral and Paillé (2012). The responses were collected on a 5-point scale and examples of items include "I speak to my colleagues to help them better understand the environmental problems" and "I voluntarily carry out environmental actions and initiatives in my daily activities at work". The internal reliability of this scale in our sample was very high (α = .94).

Wellbeing. For the purpose of the current study, we have employed an 18-item psychological wellbeing scale, that includes dimensions such as autonomy, environmental mastery, positive relations with others, self-acceptance and purpose in life (Ryff & Keyes, 1995). Sample items of this scale include "When I look at the story of my life, I am pleased with how things have turned out so far" and "Maintaining close relationships has been difficult and frustrating for me" (reversed). Participants were asked to provide their ratings of all items on a 5-point scale. The reliability of the scale in our sample was high (α = .86).

Demographic variables. The demographic variables were captured in the first round of data collection and included age and gender. For the second round of data collection, the only demographic information collected was whether the participant was still working for the same organization as initially.

Data Analysis

A path analysis was conducted using MPlus 7 (Muthén & Muthén, 1998–2012) and MLR (maximum likelihood parameter estimates with standard errors and a chi-square test statistic) estimation method, in order to test

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the proposed model. Descriptive statistics and reliability calculations have been completed using the IBM SPSS Statistics 20 software.

Results

While the χ^2 value did not clearly support whether the model does fit the data well ($\chi^2 = 9.54$, $df = 4$, $p = .049$), given that chi square values are impacted by the sample size (Bollen, 1990), the analysis was continued.

Moving with the analysis to fit indices, we considered the revised interpretation guidance of Hu and Bentler (1999). First considering an absolute fit index, SRMR, it indicated that the model is a good approximation of the data (SRMR = .046). Next, incremental fit indices provided excellent (CFI = 0.989) and good results (TLI = 0.902) on whether the model offers an improvement over the independence model (which assumes no relationship between variables). However, the RMSEA value, RMSEA = .083; 90% CI [.005, .152]; $p > .05$, raises concerns regarding the model's fit in approximating the data.

In line with an anonymous reviewer's recommendation, we compared this model of interest with an alternative model. The model considered for comparison was a simplified version, one more closely aligned to the original SDT model – that is, GA was excluded from the model, with BPNS remaining as mediator between WCQ and the four outcome variables, and GSC remaining as mediator between EID and the four outcome variables. The initial test of model fit for this alternative model was not significant ($\chi^2 = 16.04$, $df = 3$, $p = .925$), indicating that the model might not fit the data well, yet due to its sensitivity to sample size, the analysis was continued. The absolute fit index SRMR also indicated this alternative model to be a good approximation of the data (SRMR = .063). In terms of incremental fit indices, CFI showed slightly lower yet still excellent results (CFI = 0.971). However, the Tucker-Lewis Index showed poor results (TLI = 0.741), lower than the 0.902 value previously obtained for the initial model and not supporting an acceptable fit. RMSEA value, RMSEA = .147; 90% CI [.082; .221]; $p > .05$, was also higher than in the initial model of interest and maintained the concerns in regard to the model's fit in approximating the data. Overall, considering these results and its higher complexity, we concluded that the initial model of interest performed slightly better than the alternative model, indicating some support for expanding the SDT model to account for GA as intermediary outcome.

For the selected model, the standardized results of the path analysis, as detailed in Table 2, are also discussed below with focus on indirect effects.

While hypothesized to also have a direct effect on the final outcomes (IRB, OCB, OCBE and wellbeing – all at Time 1), WCQ at Time 1 only had indirect effects on all of these outcomes and significant direct effects on BPNS at Time 1 and on GA at Time 1, particularly strong in the case of BPNS at Time 1 ($\beta = .73$, $p < .01$). The total indirect effect of WCQ at Time 1 on IRB at Time 1 was significant ($\beta = .21$, $p < .01$), with the path through BPNS at Time 1 being significant ($\beta = .17$, $p < .05$) as well as the path through GA at Time 1 being significant ($\beta = .21$, $p = .05$). Similarly, the total indirect effect of WCQ at Time 1 on OCB at Time 1 was significant ($\beta = .39$, $p < .01$), only through the BPNS at Time 1 path ($\beta = .38$, $p < .01$) but not through the GA at Time 1 path. Importantly, WCQ at Time 1 also had a significant total indirect effect on OCBE at Time 1 ($\beta = .27$, $p < .01$), which was significant both through the BPNS at Time 1 path and the GA at Time 1 path. The total indirect effect of WCQ at Time 1 on wellbeing at Time 1 was also significant ($\beta = .46$, $p < .01$), both through the BPNS at Time 1 path ($\beta = .40$, $p < .01$) and the GA at Time 1 path ($\beta = .06$, $p < .01$). Taken together, these results, suggest BPNS1 as playing a more relevant role in explaining the relationship between WCQ at Time 1 and the four final outcomes (as supported by Deci et al.'s (2017) framework of self-determination theory in the workplace) than GA at Time 1 played in explaining the same relationship. Yet it is important to note that GA at Time 1 did have significant direct effects on the final four outcomes.

As hypothesized, EID at Time 0 had direct effects on OCB at Time 1($\beta = .13$, $p < .01$), OCBE at Time 1($\beta = .18$, $p < .01$) and also on GSC at Time 0 ($\beta = .23$, $p < .01$). Contrary to the hypothesized model, it did not significantly impact IRB at Time 1 or wellbeing at Time 1 in a direct manner. Moreover, the total indirect effect from EID at Time 0 to OCB at Time 1 and to OCBE at Time 1 was not significant through either of the paths. However, there was a significant yet too small total indirect effect of EID at Time 0 on IRB at Time 1($\beta = .01$, $p < .05$), with the only significant path being the one through GSC at Time 0 ($\beta = .01$, $p < .05$). Similarly, the total indirect effect of EID at Time 0 on wellbeing at Time 1 was significant yet very small ($\beta = .02$, $p < .05$), with the path through GSC at Time 0 being once again the only significant one ($\beta = .02$, $p < .05$) (see Figure 2).

Discussion

Among the mediators, as hypothesized, goal attainment (GA) did impact in-role behavior (IRB), organizational citizenship behaviors towards the environment (OCBE) and wellbeing. However, organizational citizenship behaviors (OCB) were not impacted by GA. This could potentially be explained from the perspective of intentionality – when asked to set goals, people might not proactively consider goals which have an impact on helping others or the organization. Another potential

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Table 2. *Path Analysis: Standardized Total, Total Indirect, Specific Indirect, and Direct Effects (STDYX Standardization)*

	Estimate	*SE*	Estimate/*SE*	*p*
WCQ1 → OCBE1				
WCQ1 → OCBE1 (total)	.28	.07	4.31	< .001
WCQ1 → OCBE1 (total indirect)	.27	.06	4.19	< .001
WCQ1 → BPNS1 → OCBE1	.20	.06	3.11	< .001
WCQ1 → GA1 → OCBE1	.07	.03	2.95	< .001
WCQ1 → OCBE1 (direct)	.01	.09	.11	.91
EID0 → OCBE1				
EID0 → OCBE1 (total)	.37	.07	5.74	< .001
EID0 → OCBE1 (total indirect)	.01	.02	.59	.56
EID0 → GSC0 → OCBE1	.01	.02	.42	.67
EID0 → GSC0 → BPNS1 → OCBE1	.01	.01	1.69	.09
EID0 → GSC0 → GA1 → OCBE1	–.01	.00	–1.16	.25
EID0 → OCBE1 (direct)	.36	.07	5.55	< .001
WCQ1 → OCB1				
WCQ1 → OCB1 (total)	.41	.06	6.53	< .001
WCQ1 → OCB1 (total indirect)	.39	.07	5.86	< .001
WCQ1 → BPNS1 → OCB1	.38	.06	6.04	< .001
WCQ1 → GA1 → OCB1	.01	.02	.37	.71
WCQ1 → OCB1 (direct)	.02	.09	.22	.83
EID0 → OCB1				
EID0 → OCB1 (total)	.22	.06	3.72	< .001
EID0 → OCB1 (total indirect)	.01	.02	.73	.46
EID0 → GSC0 → OCB1	.00	.01	–.30	.76
EID0 → GSC0 → BPNS1 → OCB1	.02	.01	1.95	.05
EID0 → GSC0 → GA1 → OCB1	.00	.00	–.38	.7
EID0 → OCB1 (direct)	.21	.06	3.57	< .001
WCQ1 → IRB1				
WCQ1 → IRB1 (total)	.24	.08	3.22	< .001
WCQ1 → IRB1 (total indirect)	.21	.07	2.93	< .001
WCQ1 → BPNS1 → IRB1	.17	.07	2.24	.03
WCQ1 → GA1 → IRB1	.05	.02	2.	.05
WCQ1 → IRB1 (direct)	.03	.11	.27	.79
EID0 → IRB1				
EID0 → IRB1 (total)	–.03	.06	–.49	.62
EID0 → IRB1 (total indirect)	.04	.02	2.04	.04
EID0 → GSC0 → IRB1	.03	.02	1.96	.05
EID0 → GSC0 → BPNS1 → IRB1	.01	.01	1.39	.17
EID0 → GSC0 → GA1 → IRB1	.00	.00	–.98	.33
EID0 → IRB1 (direct)	–.07	.06	–1.13	.26
WCQ1 → WELLBEING1				
WCQ1 → WELLBEING1 (total)	.43	.07	5.94	< .001
WCQ1 → WELLBEING1 (total indirect)	.46	.06	7.13	< .001
WCQ1 → BPNS1 → WELLBEING1	.40	.06	6.6	< .001
WCQ1 → GA1 → WELLBEING1	.06	.02	2.65	.01
WCQ1 → WELLBEING1 (direct)	–.03	.10	–.30	.76
EID0 → WELLBEING1				
EID0 → WELLBEING1 (total)	.07	.07	1.06	.29
EID0 → WELLBEING1 (total indirect)	.04	.02	2.24	.03
EID0 → GSC0 → WELLBEING1	.03	.01	2.01	.04
EID0 → GSC0 → BPNS1 → WELLBEING1	.02	.01	1.82	.07
EID0 → GSC0 → GA1 → WELLBEING1	.00	.00	–1.08	.28
EID0 → WELLBEING1 (direct)	.03	.06	.50	.62

Note. EID0 = environmental identity at T0; WCQ1 = work climate at T1; GSC0 = goal self-concordance at T0; BPNS1 = basic psychological needs at T1; GA1 = goal attainment at T1; IRB1 = in-role behavior at T1; OCB1 = organizational citizenship behavior at T1; OCBE1 = organizational citizenship behavior for the environment at T1; WELLBEING1 = Wellbeing at T1.

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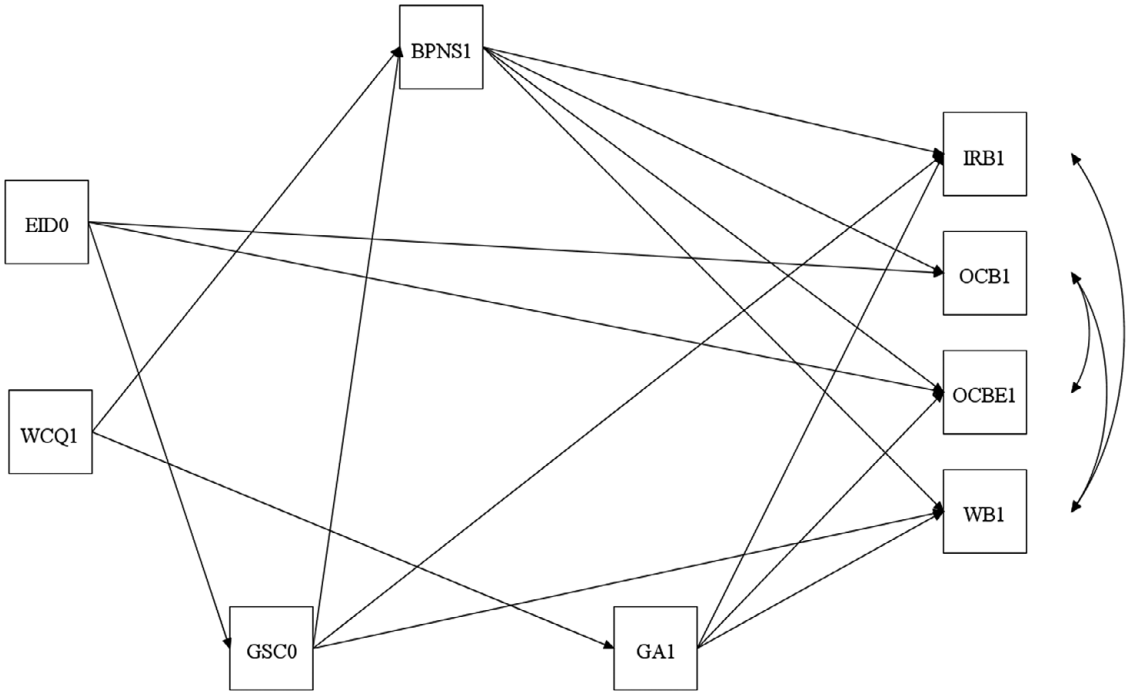

Figure 2. Confirmed Model

Note. Model fit: $\chi^2 = 9.54$, $df = 4$, $p = .049$, SRMR = .046, RMSEA = .083, 90% CI = [.005, .152], CFI = 0.989. The labels' meanings are as it follows: EID0 = environmental identity at T0; WCQ1 = work climate at T1; GSC0 = goal self-concordance at T0; BPNS1 = basic psychological needs at T1; GA1 = goal attainment at T1; IRB1 = in-role behavior at T1; OCB1 = organizational citizenship behavior at T1; OCBE1 = organizational citizenship behavior for the environment at T1; WB1 = Wellbeing at T1.

explanation comes from the perspective of limited resources/ego depletion theories – attaining own goal might leave fewer resources available for helping others in the organization. However, this second explanation seems to be contradicted by the existing relationships between GA and IRB, OCBE.

As hypothesized, BPNS was shown to impact all outcome variables. While GSC was hypothesized to impact BPNS, all four outcomes as well as GA, the data could only relate it to BPNS, IRB and wellbeing. Among the independent variables, for WCQ, the results do not support the manifestation of the direct impact on the four outcomes. Instead, BPNS and GA seem to mediate all the relationships between WCQ and the four outcomes. However, EID directly impacted OCB and OCBE. Moreover, EID indirectly (through GSC) impacted BPNS, IRB and wellbeing.

The current findings and the resulting model in particular can inform the SDT literature in three ways: (a) As a particular case of a more extensive SDT model, (b) as an integration of the SDT and self-concordance literature, and (c) as a nuanced exploration of whether the mediators specific to SDT also act as a mechanism in the relationship between environmental identity and employee performance outcomes.

First, in light of the good fit indices (particularly incremental fit) and the fact that the hypothesized model considered variables from each of the categories in the basic self-determination theory model in the workplace proposed by Deci et al. (2017), the results can be interpreted as showing some support for the overarching structure of this theoretical model. In doing so the current findings also exemplify the intricate ways in which individual differences and the workplace context ultimately impact behavioral and wellbeing outcomes. For example, the effect of work climate on employee wellbeing and performance outcomes seems to depend on the satisfaction of basic psychological needs. From a practical perspective, this finding can help explain why certain interventions aimed at improving the work climate might not succeed and could potentially be improved by also intervening at the BPNS level. More broadly, the comparison of direct versus indirect effects can support human resources and management practitioners in identifying more relevant "levers" to monitor as predictors of wellbeing and employee performance outcomes. Team level action plans such as the ones used in employee engagement programs could target the "levers" the current model pinpoints as having larger effects.

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Second, the current study integrated into the SDT model the advancements made in the self-concordance literature and thus added the goal attainment variable as an intermediary to wellbeing and performance outcomes. However, GA only seemed to interact with WCQ in indirectly impacting the wellbeing, IRB and OCBE outcomes (but not OCB). These paths might indicate that when selecting goals, participants chose goals relevant to their work and non-work social roles, including some which might overlap with pro-environmental behaviors (while the manifestation of OCB might be contingent on opportunity, rather than plans or goals). Notably, the relationship between GSC and GA was not supported. Though contrary to what is theoretically and empirically supported by the goal self-concordance literature, our finding is aligned to some other empirical studies on the same GSC-GA relationship (Greguras & Diefendorff, 2010; Judge et al., 2005; van Dierendonck, 2015). We therefore echo the calls for further exploring this relationship and its potential moderators. In fact, some researchers have pointed towards student settings versus work settings as impacting the relationship between GSC and goal progress, performance, and wellbeing – since work settings, in contrast to learning settings, are more likely to witness the manifestation of extrinsically motivated work goals, which are achieved due to external motivators, such as the need for monetary rewards – thus contrary to what would be expected from an autonomous motivation or self-concordance perspective (van Dierendonck, 2015).

Third, the current findings can inform interventions aimed at encouraging employees to manifest citizenship behaviors for the environment. The significant direct impact of EID on OCBE is not surprising, given the conceptual overlap between OCBE and PEB and strong theoretical and emergent empirical support of EID as predictor of PEB. The observed indirect impacts in the EID-OCBE relationship were not significant, indicating that the mechanisms through which this relationship operates are not those specific to SDT. Nevertheless, the overall results pertaining to EID indicate that it can indeed impact not only OCBE but other outcomes too. EID's significant direct effect on OCB might signal that those with strong EID will also be more likely to manifest non-environmental citizenship behaviors at work. Furthermore, the indirect effects EID had through GSC on BPNS, IRB and wellbeing confirm the relevance of considering GSC as an intervention point, yet not necessarily for encouraging OCBE, as it was expected. Given that prior interventions aimed at encouraging specific pro-environmental behaviors by increasing GSC (Unsworth & McNeill, 2016), the current findings help set more accurate expectations in regard to the transferability of such interventions to encouraging OCBE and support the design of more targeted future interventions.

The current study's limitations mainly come from the choice of measures and data collection methods, as well as the inherent limitations of path analysis. We discuss these limitations below, along with ways to address them and avenues for future research.

First, we acknowledge the limitations associated with our choice of measurement for GSC. Sheldon et al. (2017) provided a comprehensive analysis of the different measurement options and Adriasola (2014) designed a GSC measure that accounts not only for the strength of autonomous versus controlled motivations, but also for the interconnections between goals within an individual's goal hierarchy. Their revised conceptualization also accounts for within-individual versus between-individual effects. Future studies could consider employing Adriasola's (2014) scale, as well as other researchers' observation that weighted scores might better capture the different proportions of intrinsic and extrinsic motivations that exist on the self-determination continuum (Ünlü, 2016).

Second, task complexity could further be explored in the context of motivations for non-restricted goals, their attainment and their consequences. As referenced by Deci et al. (2017), the meta-analytic study of Weibel et al. (2010) showed that the relationship between extrinsic incentives and performance is dependent on the task's complexity. Likewise, Adriasola (2014) showed that high self-concordance had the strongest impact on low prototypicality tasks. Since in the current study, the goals selected by participants were likely a mix of simple and complex tasks, this characteristic might also have impacted the study's results. Future studies could invite participants to categorize their self-selected goals as either complex or simple.

Third, the conceptual delineation of non-restricted goals can further be improved. In introducing the concept of non-restricted goals, unlike prior studies, we did not prompt participants to select a specific category of goals (such as work, study or personal goals). By pre-selecting participants who work, we have implicitly allowed them to also include work-related goals. Future studies could better clarify the overlap as well as the differences between work, non-work and non-restricted goals (e.g., by introducing additional items inviting participants to categorize their goals as strictly work-related, strictly personal, or relevant for their work and non-work life domains).

Finally, there are limitations resulting from employing self-report data and path analysis. The main limitation of path analysis as it applied to the current study is not being able to confirm the direction of the relationships in the model. Testing for circular relationships

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would be particularly relevant to consider in future studies. Circular relationships have previously been considered for job satisfaction and job performance (Judge et al., 2001). Relationships between goal progress and wellbeing have also been studied as bidirectional (Koestner, 2008).

Future directions could aim to expand the current framework to include further related aspects, such as: (a) As it pertains to GSC – how it interacts with goal conflict, ambivalence, and self-discrepancy (Kelly et al., 2015) and (b) as it pertains to self-determination and self-regulations literature – strategic goal disengagement and re-engagement with an alternative goal when being faced with unattainable goals (Ntoumanis, Healy, Sedikides, Duda, et al., 2014; Ntoumanis, Healy, Sedikides, Smith, et al., 2014; Shah, 2005).

The current study aimed to explore a modified version of the basic self-determination theory model in the workplace proposed by Deci et al. (2017). Goal attainment seems to be a valuable intermediary outcome to add to this overarching model, as it interacted with WCQ in indirectly impacting wellbeing, IRB and OCBE outcomes. Environmental identity seems to be a valuable antecedent to consider beyond its relationship with OCBE, as it also showed effects on OCB. Nevertheless, mechanisms beyond those we considered seem to explain these relationships, as these effects were direct. Though prior interventions have acted upon GSC to increase pro-environmental behaviors outside the workplace, the current results do not support the same approach in encouraging OCBE. Still, GSC does seem to be a potential intervention point in impacting BPNS, IRB and wellbeing.

References

Adriasola, E. (2014). *Motivation for multiple goals at work: The role of goal hierarchy self-concordance* [Doctoral dissertation, University of Western Australia]. UWA Profiles and Research Repository. https://research-repository.uwa.edu.au/en/publications/motivation-for-multiple-goals-at-work-the-role-of-goal-hierarchy-

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*(10), 2045–2068. https://doi.org/10.1111/j.1559-1816.2004.tb02690.x

Binnewies, C., Sonnentag, S., & Mojza, E. J. (2009). Feeling recovered and thinking about the good sides of one's work. *Journal of Occupational Health Psychology*, *14*, 243–256. https://doi.org/10.1037/a0014933

Boiral, O., & Paillé, P. (2012). Organizational citizenship behavior for the environment: Measurement and validation. *Journal of Business Ethics*, *109*(4), 431–445. https://doi.org/10.1007/s10551-011-1138-9

Bollen, K. A. (1990). Overall fit in covariance structure models: Two types of sample size effects. *Psychological Bulletin*, *107*(2), 256–259. https://doi.org/10.1037/0033-2909.107.2.256

Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, *46*(5), 554–571. https://doi.org/10.2307/30040649

Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, *29*(6), 2156–2160. https://doi.org/10.1016/J.CHB.2013.05.009

De Cooman, R., Stynen, D., van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. *Journal of Applied Social Psychology*, *43*(6), 1342–1352. https://doi.org/10.1111/jasp.12143

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *The Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 19–43. https://doi.org/10.1146/annurev-orgpsych

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, *49*(3), 182–185. https://doi.org/10.1037/a0012801

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, *27*(8), 930–942. https://doi.org/10.1177/0146167201278002

Emmons, R. A. (1986). Personal strivings. An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, *51*(5), 1058–1068. https://doi.org/10.1037/0022-3514.51.5.1058

Geurts, S. A., & Demerouti, E. (2002). Work/non-work interface: A review of theories and findings. In M. J. Schabracq, J. A. M. Winnubst, & C.L. Cooper (Eds.). *The handbook of work and health psychology* (2nd Ed., pp. 279–312). John Wiley & Sons, Ltd. https://doi.org/10.1002/0470013400.ch14

Goh, J., Pfeffer, J., & Zenios, S. A. (2016). The relationship between workplace stressors and mortality and health costs in the United States. *Management Science*, *62*(2), 608–628. https://doi.org/10.1287/mnsc.2014.2115

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

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus

https://doi.org/10.1017/SJP.2022.25 Published online by Cambridge University Press

new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, *23*(21), 1789–1805. https://doi.org/10.1111/j.1559-1816.1993.tb01066.x

Ilies, R., Schwind, K. M., Wagner, D. T., Johnson, M. D., DeRue, D. S., & Ilgen, D. R. (2007). When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology*, *92*, 1368–1379. https://doi.org/10.1037/0021-9010.92.5.1368

Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology*, *90*(2), 257–268. https://doi.org/10.1037/0021-9010.90.2.257

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376

Kabanoff, B. (1980). Work and nonwork: A review of models, methods, and findings. *Psychological Bulletin*, *88*(1), 60–77. https://doi.org/10.1037/0033-2909.88.1.60

Kasser, T., Davey, J., & Ryan, R. M. (1992). Motivation and employee-supervisor discrepancies in a psychiatric vocational rehabilitation setting. *Rehabilitation Psychology*, *37*(3), 175–188. https://doi.org/10.1037/h0079104

Kelly, R. E., Mansell, W., & Wood, A. M. (2015). Goal conflict and well-being: A review and hierarchical model of goal conflict, ambivalence, self-discrepancy and self-concordance. *Personality and Individual Differences*, *85*, 212–229. https://doi.org/10.1016/j.paid.2015.05.011

Koestner, R. (2008). Reaching one's personal goals: A motivational perspective focused on autonomy. *Canadian Psychology/Psychologie Canadienne*, *49*(1), 60–67. https://doi.org/10.1037/0708-5591.49.1.60

Koestner, R., Otis, N., Powers, T. A., Pelletier, L., & Gagnon, H. (2008). Autonomous motivation, controlled motivation, and goal progress. *Journal of Personality*, *76*(5), 1201–1230. https://doi.org/10.1111/j.1467-6494.2008.00519.x

Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus User's guide* (7th Ed.). Muthén & Muthén.

Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organization & Environment*, *28*(1), 103–125. https://doi.org/10.1177/1086026615575773

Ntoumanis, N., Healy, L. C., Sedikides, C., Duda, J., Stewart, B., Smith, A., & Bond, J. (2014). When the going gets tough: The "why" of goal striving matters. *Journal of Personality*, *82*(3), 225–236. https://doi.org/10.1111/jopy.12047

Ntoumanis, N., Healy, L. C., Sedikides, C., Smith, A. L., & Duda, J. L. (2014). Self-regulatory responses to unattainable goals: The role of goal motives. *Self and Identity*, *13*(5), 594–612. https://doi.org/10.1080/15298868.2014.889033

Olivos, P., & Aragonés, J.-I. (2015). Psychometric properties of the Environmental Identity Scale (EID). *Psyecology*, *2*, 65–74. https://doi.org/10.1174/217119711794394653

Osbaldiston, R., & Schott, J. P. (2012). Environmental sustainability and behavioral science: Meta-analysis of proenvironmental behavior experiments. *Environment and Behavior*, *44*(2), 257–299. https://doi.org/10.1177/0013916511402673

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153–163. https://doi.org/10.1016/J.JESP.2017.01.006

Pelletier, L. G., & Sharp, E. (2008). Persuasive communication and proenvironmental behaviors: How message tailoring and message framing can improve the integration of behaviors through self-determined motivation. *Canadian Psychology/Psychologie Canadienne*, *49*(3), 210–217. https://doi.org/10.1037/a0012755

Pelletier, L. G., Tuson, K. M., Green-Demers, I., Noels, K., & Beaton, A. M. (1998). Why are you doing things for the environment? The Motivation Toward the Environment Scale (MTES)1. *Journal of Applied Social Psychology*, *28*(5), 437–468. https://doi.org/10.1111/j.1559-1816.1998.tb01714.x

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*(4), 719–727. https://doi.org/10.1037/0022-3514.69.4.719

Shah, J. Y. (2005). The automatic pursuit and management of goals. *Current Directions in Psychological Science*, *14*(1), 10–13. https://doi.org/10.1111/j.0963-7214.2005.00325.x

Sheldon, K. M., & Elliot, A. J. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, *24*, 546–557. http://doi.org/10.1177/0146167298245010

Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, *76*, 482–497. https://doi.org/10.1037/0022-3514.76.3.482

Sheldon, K. M., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Personality and Social Psychology Bulletin*, *24*(12), 1319–1331. https://doi.org/10.1177/01461672982412006

Sheldon, K. M., Osin, E. N., Gordeeva, T. O., Suchkov, D. D., & Sychev, O. A. (2017). Evaluating the dimensionality of self-determination theory's relative autonomy continuum. *Personality and Social Psychology Bulletin*, *43*(9), 1215–1238. https://doi.org/10.1177/0146167217711915

Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. *Personality and Social Psychology Bulletin*, *30*(4), 475–486. https://doi.org/10.1177/0146167203261883

Sheldon, K. M., Turban, D. B., Brown, K. G., Barrick, M. R., & Judge, T. A. (2003). Applying self-determination theory to organizational research. *Research in Personnel and Human Resources Management*, *22*, 357–393. https://doi.org/10.1016/S0742-7301(03)22008-9

https://doi.org/10.1017/SJP.2022.25 Published online by Cambridge University Press

Ünlü, A. (2016). Adjusting potentially confounded scoring protocols for motivation aggregation in organismic integration theory: An exemplification with the relative autonomy or self-determination index. *Frontiers in Psychology*, Article 7. https://doi.org/10.3389/fpsyg.2016.00272

Unsworth, K. L., & McNeill, I. M. (2016). Increasing pro-environmental behaviors by increasing self-concordance: Testing an intervention. *Journal of Applied Psychology*, *10*, 88–103. https://doi.org/10.1037/apl0000155

van Dierendonck, D. (2015). The influence of planning, support and self-concordance on goal progress and job satisfaction. *Evidence-Based HRM*: *A Global Forum for Empirical Scholarship*, *3*(3), 206–221. https://doi.org/10.1108/EBHRM-04-2014-0013

Weibel, A., Rost, K., & Osterloh, M. (2010). Pay for performance in the public sector - Benefits and (hidden) costs. *Journal of Public Administration Research and Theory*, *20*(2), 387–412. https://doi.org/10.1093/jopart/mup009

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*(3), 601–617. https://doi.org/10.1177/014920639101700305

https://doi.org/10.1017/SJP.2022.25 Published online by Cambridge University Press