Personal orientation as an antecedent to career stress and employability confidence:
The intervening roles of career goal-performance discrepancy and career goal importance

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This paper can be cited as:

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Abstract
We assessed the underlying mechanisms associated with career-related stress in young adults by testing a model in which personal orientation (proactivity and interpersonal sensitivity) was related to well-being (career distress and employability confidence), this relationship was mediated by career goal-performance discrepancy, and career goal importance moderated the relationship between orientation and discrepancy, and moderated between orientation and well-being via discrepancy. Participants were 564 young adults enrolled in a wide variety of first year university courses (77% female; mean age = 20.3 years). We confirmed that proactivity (negative) and interpersonal sensitivity (positive) were associated with discrepancy, and that discrepancy was associated with career distress (positive) and employability (negative). Discrepancy operated as a mediator in these relationships, and career goal importance moderated between both personal orientations and discrepancy, and moderated the mediated relationship between personal orientation and both outcomes. The study identifies important antecedent variables to career-related well-being and highlights underlying mechanisms that potentially lead to its development. In this way, the study extends theory related to career goal management and informs interventions aimed at career development.

Keywords: career goal-performance discrepancy; proactive orientation; interpersonal sensitivity; career distress; perceived employability; goal management
In the career domain, personal orientations, which refer to the individual’s general style of behaving to meet underlying personal needs (Aspinwall & Taylor, 1992; Crant, 2000), have been shown to be related to important career outcomes for young adults, such as career exploration, career goals (Sung, Turner, & Kaewchinda, 2013), vocational identity (Creed & Hennesey, 2016), job search success (Brown, Cober, Kane, Levy, & Shalhoop, 2006), career decidedness (Hirschi, Lee, Porfeli, & Vondracek, 2013), and well-being (Uskul & Greenglass, 2005). Few studies, however, have assessed the underlying mechanisms that link these personal orientations to behavioural and affective outcomes (Hirschi et al., 2013). Identifying and understanding the underlying mechanisms that drive career behaviour and affect is important as this provides insight into how young people make career decisions and manage their career lives, and it opens doors for developing and refining interventions that can assist those who struggle with their career progress (Lent & Hacket, 1994).

Understanding and managing negative affect in young adults is especially important as there is a growing awareness that poor well-being can be directly and indirectly related to disrupted vocational development and poorer career progress (Skorikov, 2007a, b).

The underlying mechanism that we assessed was career goal-performance discrepancy appraisal (Creed & Hood, 2015), which, from the perspective of goal setting and self-regulatory theories (cf. Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990), is considered the primary motivational force that drives affect, self-regulatory behaviours, and goal adjustment. In brief, individuals are disturbed when they identify a discrepancy between a set goal (or personal standard) and their progress towards that goal (or meeting their personal standard), and seek to reduce this anxiety by implementing strategies that resolve the discrepancy, such as adjusting their goal (or standard) or changing their behaviour.

We tested a model in which personal orientations (we separately assessed two orientations: proactivity and interpersonal rejection sensitivity) were related to two aspects of career-related well-being (career distress and employability confidence; cf. Ryff, 1989), and in which these relationships were explained by the mechanism of career goal-performance discrepancy appraisal. Additionally, as goal pursuit, appraisal, and affect are influenced by goal salience (Locke & Latham, 1990), we also assessed the role of career goal importance in moderating the relationship between orientation and career goal-performance discrepancy, and tested if goal importance has a conditional effect on the indirect pathway between orientation and well-being. See Figure 1. To the best of our knowledge, this is the first study to assess the role of goal-performance discrepancy appraisal as a mediator between personal orientations and outcomes in the career domain.
Goal-Performance Discrepancies

The behaviour of young people is driven largely by them setting goals for themselves (consciously and unconsciously) or having them set by others (e.g., parents, education systems; Lord, Diefendorff, Schmidt, & Hall, 2010). Young people deliberately focus on how their interests and needs might be met and consciously set their goals to achieve these outcomes. They also respond and act unconsciously to internal and external pressures via primed responses, personal biases based on their typical ways of dealing with the world, and from habit. For example, as goals are cognitive structures, goals, and the behaviours associated with achieving them, can be primed by social and environmental cues (Shah & Kruglanski, 2003). Goals, which are “internally represented desired states” (Vancouver & Day, 2005, p. 158), are then continuously appraised as to their suitability and capacity to be achieved. When goals are appraised as being unachievable, or progress towards them is evaluated as being insufficient, they are either adjusted or the behaviours associated with their achievement are modified; that is, self-regulatory strategies are implemented (Lord et al., 2010). Specifically, goal-appraisal identifies if there is a discrepancy between the set goal (or set standard) and the performance or progress required to meet the goal (i.e., is progress towards the goal on track?).

A negative goal-performance discrepancy arises when there is a gap between what is required to achieve the goal and the current-appraised progress. When this occurs, individuals can adjust the goal (e.g., lower it), adjust their behaviours (e.g., work harder), or do both (e.g., lower expectations and increase effort). For example, a young person who aspires to be a medical practitioner does poorly in a critical exam. From this goal-performance discrepancy, the young person might consider (a) pursuing a career of nursing instead (i.e., lowering the goal), (b) repeating the subject with a commitment to doing better (i.e., working harder), or (c) switching their focus to nursing and committing to working harder for the nursing exams (i.e., both lowering the goal and increasing effort). A positive goal-performance discrepancy occurs when individuals are ahead in their progress towards their goal; in this case, individuals might raise their goal (e.g., aspire to being a medical specialist) or reduce their effort (e.g., study less; Bandura, 1989; Higgins, 1987). Identifying and responding to goal-performance discrepancies, thus, constitute the primary underlying mechanisms that regulate and drive goals and goal-achievement behaviours (Lord et al., 2010). Negative goal-performance discrepancies have a disproportionately more powerful effect on goal adjustment and revision than do positive goal-performance discrepancies (i.e., negative discrepancies elicit stronger responses in young people than do positive...
discrepancies; Wang & Mukhopadhyay, 2012). Therefore, we focused our study on negative goal-performance discrepancies, which is consistent with other studies examining discrepancies, both in the general literature (e.g., Donovan & Williams, 2003) and in the career domain (e.g., Anderson & Mounts, 2012; Tsaousides & Jome, 2008).

**Outcomes of Negative Goal-Performance Discrepancies**

Small negative goal-performance discrepancies result in feelings of disappointment and dissatisfaction (Higgins, 1987; Lord et al., 2010), whereas large negative discrepancies can generate significant personal disruptions that can have serious mental health consequences (Fejfar & Hoyle, 2000). Specific to the career domain, the identity control theory (Anderson & Mounts, 2012; Kerpelman, Pittman, & Lamke, 1997) states that negative goal-performance discrepancies stimulate personal disturbances or crises, which, in turn, generate anxiety and distress that then lead to self-regulatory and goal adjustment strategies aimed at restoring the goal-performance equilibrium. Negative discrepancies have been found to be associated with a range of negative well-being effects, including workplace dissatisfaction and negative affect in adult employees (Carr, 1997; Hesketh & McLachlan, 1991), and career indecision and lower levels of career-related confidence, career maturity, self-esteem, and general well-being in adolescents (Patton & Creed, 2007; Ferguson, Hafen, & Laursen, 2010).

We identified two studies in which a direct measure of negative career goal-performance discrepancy was positively related to career-related distress (Creed, Wamelink, & Hu, 2015; Hu, Hood, & Creed, 2016a), with one of these studies finding that the relationship was weaker when self-regulatory behaviours of career exploration and planning were higher (Creed, Wamelink, et al., 2015). Thus, our first hypothesis is a replication with an extension on previous findings to employability confidence outcomes. We aimed to confirm the stability of the discrepancy/well-being relationship under a different condition (i.e., replicate findings using a different sample; Lindsay & Ehrenberg, 1993) and to support external validity of the current study (Calder, Phillips, & Tybout, 1982). Hypothesis 1 was that career goal-performance discrepancy is associated positively with career-related distress (which encompasses negative feelings such as helplessness, anxiety, and general negative affect; Creed, Hood, Praskova, & Makransky, 2015) and employability confidence (which refers to individual perceptions of capacity to obtain employment commensurate with level of qualification; Rothwell, Herbert, & Rothwell, 2008).

**Hypothesis 1:** Career goal-performance discrepancy is associated positively with career distress (H1a) and associated negatively with employability confidence (H1b).

**Antecedents to Goal-Performance Discrepancies**
Goal setting theories (c.f., Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990) specify that feedback is the immediate antecedent to a goal-performance discrepancy. Feedback, which can originate from the external environment (e.g., from others, the media) or from internal reflection (Hattie & Timperley, 2007; Shute, 2008), informs the individual about goal suitability, progress, and what actions need to be taken to increase the probability of reaching a goal (Hu et al., 2016b). Feedback that is inconsistent with the goal standard or target (e.g., advice that the goal is unrealistic) results in a goal-performance discrepancy. This discrepancy, in turn, stimulates discomfort, which leads to goal adjustment or behaviour change, and then leads the individual to seek further feedback to inform about the suitability, or otherwise, of any adjustments. Thus, feedback is central to goal setting, adjustment, and management (Kerpelman et al., 1997; Lord et al., 2010). Feedback on the job, for example, informs employees about the standard, pace, and techniques required to complete a task (Renn & Fedor, 2001), and career-related feedback to young adults similarly informs them about the suitability of their aspirations, whether they are on track to achieve them, and what they could do to boost the likelihood of success (Kerpelman & Pittman, 2001).

Feedback from others and self-reflection are influenced by the particular personal characteristics and orientations that colour the individual’s perceptual processes and thinking. These orientations, for example, predispose individuals to view interpersonal communications and the external environment in particular ways, which has the effect of distorting feedback that is received (van de Vliert, Shi, Sanders, Wang, & Huang, 2004). Bias in receiving and interpreting feedback, for example, can result when the meaning applied to feedback differs from that intended, when particular values and beliefs come into play, and depending on how friendly and/or credible the source of the information is viewed (Lam, Yik, & Schaubroeck, 2002). Orientations that have been examined in relation to feedback include goal orientation (Whitaker & Levy, 2012), performance expectations (Northcraft & Ashford, 1990), learning orientation (DeRue & Wellman, 2009), and feedback orientation (Dahling, Chau, & O’Malley, 2012).

We examined two orientations that potentially influence the feedback process in young people. The first is proactive orientation, or proactivity, which reflects processes associated with showing initiative, seeking opportunities, and persevering (in contrast to individuals with a more passive orientation who are more likely to accept and endure their existing situation; Bateman & Crant, 1993). In adult samples, proactivity is related positively to both subjective (i.e., career and job satisfaction) and objective ratings (i.e., salary and promotion) of general career success, as well as to specific aspects of career development, such as career
self-efficacy and job seeking self-efficacy (Fuller & Marler, 2009). In young people, proactive orientation is related positively to career adaptability (specifically to career planning, exploration, and decision-making) and self-regulatory strategies (Creed, Macpherson, & Hood, 2011). Pertinent to the current study, having a proactive career orientation reduces stress and uncertainty about the future (Saks & Ashforth, 1996) and is associated with better well-being (Flum & Blustein, 2006). Studies in this area are consistent with theoretical positions that being proactive results in better career outcomes and greater psychological health (Blustein, 2001; Praskova, Creed, & Hood, 2015).

The second orientation that can influence the feedback process in young people is interpersonal rejection sensitivity, which reflects the level of a young person’s “awareness of and sensitivity to, the behavior and feelings of others” (Boyce & Parker, 1989, p.342). Individuals high on interpersonal rejection sensitivity are alert to the feedback and reactions of others (i.e., what others think, say, and do), are concerned that others will not think well of them, and engage in behaviours that are aimed at reducing the likelihood of criticism (Harb, Heimberg, Fresco, Schneier, & Liebowitz, 2002). Interpersonal rejection sensitivity is related to poorer social- and self-esteem, higher levels of negative affect and social anxiety, poorer educational achievement (Harb et al., 2002; McCabe, Blankstein, & Mills, 1999), and greater social isolation and withdrawal (Watson & Nesdale, 2012). In the career domain, developing social contacts and networking, for example, is critical for career development, success, and satisfaction (Wolff & Moser, 2009), and interpersonal rejection sensitivity is likely to affect activities related to all of these outcomes. This is because young people who are sensitive to interpersonal rejection will be attuned to negative feedback from others about their career choices and activities, likely to worry that they are doing the “right thing” regarding their career, and more likely to enact “safe” career paths, rather than career paths that meet their own needs and interests, so as not to elicit criticisms from important others (cf. Harb et al., 2002).

Underlying orientations refer to the way that young people think about and manage themselves and deal with their environment. The two orientations that we selected to examine in this study reflect the two broad approaches that people take to organise their world: that of primary and secondary control approaches (Weisz, 1990). These two orientations distinguish between those who are oriented to act to influence or change the people and situations around them, reflecting primary control (i.e., act proactively), and those who have a preference to accommodate to people and situations rather than change them, reflecting secondary control (i.e., be influenced by interpersonal rejection sensitivity).
Thus, when young people reflect on, or receive feedback about, their career direction and progress, they will be more or less responsive, and will perceive fewer or more discrepancies, depending on their level of proactivity and interpersonal rejection sensitivity, respectively. For example, young people with a high degree of proactivity will both elicit (Alvord & Grados, 2005) and perceive (Harb et al., 2002) less negative feedback from others than those with lower levels of proactivity, leading them to identify fewer discrepancies in relation to their goal suitability, goal progress, and goal activities. Young people who are hypersensitive to the opinions of others (i.e., high on interpersonal rejection sensitivity) will be more attuned to feedback, especially negative feedback regarding goal suitability and progress, and will, in turn, experience more goal discrepancies than those who are not as sensitive. Based on this, our second hypothesis, which has not previously been tested, is that goal orientation (proactive orientation and interpersonal rejection sensitivity) is associated with career goal-performance discrepancy: specifically, that proactive orientation is associated with less discrepancy, and interpersonal rejection sensitivity is associated with more discrepancy.

Hypothesis 2: Proactive orientation is associated negatively (H2a) and interpersonal rejection sensitivity is associated positively with career goal-performance discrepancy (H2b).

Goal-Performance Discrepancies as Mediator

Goal setting theories (c.f., Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990) state that feedback provides the impetus for appraising goal progress and for identifying goal-performance discrepancies, which, in turn, stimulate affective responses and behaviours, and lead the person to seek further feedback to determine how successful behaviour changes have been. Both proactive orientation and interpersonal rejection sensitivity are likely to influence the feedback process (e.g., how much is solicited, bias in selecting feedback, how it is interpreted; van de Vliert et al., 2004), and thus influence identification and subsequent affective and behavioural responses. Proactive orientation has been shown to be related to higher job and career satisfaction (Erdogan & Bauer, 2005) and reduced anxiety and uncertainty (Saks & Ashforth, 1996) in adults, and to higher positive affect, career self-efficacy (Hirschi et al., 2013), and career satisfaction (Hirschi, Freund, & Herrmann, 2014) in young adults. Similarly, interpersonally rejection sensitive adults are more socially anxious (Harb et al., 2002), and interpersonally rejection sensitive young adults exhibit poorer self-esteem and more depressive symptoms (McCabe et al., 1999). As both orientations can potentially influence goal-performance discrepancy appraisal and are also related to well-being, we assessed the theoretical proposal (e.g., Kerpelman et al., 1997) that
career goal-performance discrepancy acts as a mediator between the personal orientation factors and well-being. While this mediation is expected theoretically, it has not been tested in the career domain. Our hypotheses here were:

**Hypothesis 3:** Career goal-performance discrepancy mediates the relationships between proactive orientation and career distress (H3a) and employability confidence (H3b), and between interpersonal rejection sensitivity and career distress (H3c) and employability confidence (H3d).

**Career Goal Importance**

In goal setting theory, goal importance, defined as the personal value attached to a goal (Locke & Latham, 1990), is considered primarily a moderating variable. For example, when goal importance is higher, goal commitment, task performance, belief in achievability of the goal, and goal striving behaviours are higher (Haratsis, Hood, & Creed, 2015; Klein, Cooper, & Monahan, 2013; Locke & Latham, 2013). In relation to goal-performance discrepancies, it can be expected that these will be lower when individuals have a proactive orientation and work towards an important goal, as having an important goal leads them to work more actively towards altering their situation to reduce discrepancies identified between their perceived and preferred states (Brandstädter & Rothermund, 2002; Haratsis et al., 2015). Similarly, even when interpersonal rejection sensitivity is high, goal-performance discrepancy will be lower when goal importance is perceived as high. Thus, our expectations here were that goal importance would act as an enhancer in the relationship between proactive orientation and goal-performance discrepancy (i.e., strengthen the relationship) and as a buffer in the relationship between interpersonal rejection sensitivity and goal-performance discrepancy (i.e., weaken the relationship; Jose, 2013).

**Hypothesis 4:** When goal importance is higher, the negative relationship between proactive orientation and career goal-performance discrepancy is stronger (H4a), and the positive relationship between interpersonal rejection sensitivity and career goal-performance discrepancy is weaker (H4b).

We were also interested in the role of goal importance in the mediated relationship between personal orientation and well-being (via goal-performance discrepancies). Therefore, we tested whether this mediated relationship is conditional on the level of importance attached to the goal. That is, when higher goal importance strengthens the negative relationship between proactivity and discrepancy, there will be a conditional effect on well-being, with well-being being higher when goal importance is higher. A similar conditional
effect is expected when interpersonal rejection sensitivity is considered: well-being is higher when goal importance is higher.

Hypothesis 5: The mediated relationship between proactive orientation and career distress via discrepancy is stronger (i.e., distress is lower; H5a) and the mediated relationship between proactive orientation and employability confidence via discrepancy is stronger (i.e., confidence is higher; H5b) when goal importance is higher; the mediated relationship between interpersonal rejection sensitivity and career distress via discrepancy is weaker (i.e., distress is lower; H5c) and the mediated relationship between interpersonal rejection sensitivity and employability confidence via discrepancy is weaker (i.e., confidence is higher; H5d) when goal importance is higher.

Career-related stress is an important consideration in the development and adjustment of young people (Skorikov, 2007a, b). Testing the proposed relationships will contribute to a better understanding of the antecedents to this stress and inform about the underlying mechanisms that lead to its development and how it might be ameliorated. As both proactivity and interpersonal rejection sensitivity are responsive to change (Multon, Heppner, Gysbers, Zook, & Ellis-Kalton, 2001), identifying how these personal orientations influence appraised discrepancies and, in turn, well-being, and how they might interact with goal importance, can inform career interventions for young people struggling with their career development.

Method

Participants

Participants were 564 young adults enrolled in a wide variety of courses in the first semester of their first year at a mid-level, Australian university. The multi-campus university is situated on the outskirts of a capital city and draws students from both urban and semi-rural settings and a range of SES backgrounds. There were 435 young women (77%) and 129 young men (23%), whose mean age was 20.3 years (SD = 3.1). The vast majority of students were Caucasian, which is typical of universities in Australia, and of the Australian population, which does not contain large ethnic and/or racial minorities present in some other countries. When asked what grades they achieved, on average, in their last year of high school, 131 (23.2%) indicated very high achievement, 318 (56.4%) indicated high achievement, and 115 (20.4%) indicated satisfactory achievement. As a proxy for socio-economic status (European Social Survey, 2010), we asked which description came closest to representing their family’s economic situation: 197 (34.9%) indicated they were living comfortably on their present income, 264 (46.8%) were managing on present income, 81
(14.4%), were finding it difficult on present income, and 22 (3.9%) were finding it very difficult.

**Measures**

Participants were assessed on measures tapping personal orientation (proactivity and interpersonal rejection sensitivity), career goal importance (career goal commitment), career goal-performance discrepancy, career distress, and confidence regarding employability. We used a 6-point response format for all scales (i.e., 1 = strongly disagree to 6 = strongly agree), which optimises reliability (Weng, 2004) and avoids the use of a mid-point, which respondents tend to overuse unnecessarily (Borgers, Sikkel, & Hox, 2004). Items were totalled, with higher scores reflecting higher levels of a construct.

**Career goal-performance discrepancy.** The 12-item Career Goal Discrepancy Scale (Creed & Hood, 2015; originally a 6-point response format) assessed the perceived gap between current and future occupational self/situation (i.e., assessed the gap in progress being made towards achieving career goals). The scale taps four underlying domains: appraisals of achievement, ability, effort, and standard-related discrepancies. Sample items are “My performance so far will not get me the career I want” and “I thought I had the ability to get the job that I wanted, but now I am not so sure”. Creed, Wamelink, et al. (2015) reported alpha of .96 with a heterogeneous sample of young adults and, in support of validity, found discrepancy to be related positively to negative feedback from others and to career distress. Alpha was .96.

**Career distress.** This was assessed using the 9-item Career Distress Scale (Creed, Hood et al., 2015; originally a 6-point response format), which taps level of subjective distress in relation to career decision making and career goal setting. Sample items are: “I often feel down or depressed about selecting a career” and “I feel stress or pressure to select a satisfying career”. The authors reported an alpha of .87 with young adults and, in support of validity, found the scale to be associated positively with negative affect and negatively with positive affect. Alpha was .91.

**Personal Orientation.** We assessed two underlying orientations to the way people think about and manage themselves and deal with their environment: proactivity and interpersonal rejection sensitivity. We used the 5-item Proactivity Scale (Porath & Bateman, 2006; originally a 7-point response format) to assess proactive orientation, which is underpinned by people’s needs to be active and manipulate and control their environment. High scorers on this construct show initiative and are prepared to take action and persist with it, rather than passively adapt to their circumstances, which is reflected in lower scores. Sample items are
“No matter what the odds, if I believe in something I will make it happen” and “If I believe in an idea, no obstacle will prevent me from making it happen”. Porath and Bateman (2006) reported an alpha of .80 and found the scale to be related negatively to avoidance orientation and positively to job performance, supporting validity. Cronbach alpha in our study was .87.

Participants also completed the 7-item Interpersonal Awareness Subscale from the Interpersonal Sensitivity Measure (Boyce & Parker, 1989; originally a 4-point response format). This subscale assesses worries regarding the opinions of others, and is underpinned by thought processes that involve rumination, cautiousness, and avoidance of risk taking. Sample items are “I worry about being criticised for things I have said or done” and “I worry about what others think of me”. Consistent with this, Luty, Joyce, Mulder, Sullivan, and McKenzie (2002) found interpersonal awareness to be related negatively to novelty seeking and positively to harm reduction. Boyce and Parker (1989) reported internal reliability coefficients of > .80 with different samples, and supported validity by showing that interpersonal awareness was positively associated with stress and worry. Alpha was .87.

**Career goal importance.** We used the 5-item Goal Commitment Scale (Klein, Wesson, Hollenbeck, Wright, & DeShon, 2001; originally a 5-point response format), which we modified to refer to the individual’s career goal (e.g., “I am strongly committed to pursuing this goal” was changed to “I am strongly committed to pursuing my career goal”, and “Quite frankly, I don’t care if I achieve this goal or not” became “Quite frankly, I don’t care if I achieve my career goal or not”). Validity of the original scale was supported by expert review, meta-analytic confirmatory factor analysis, and by testing correlations with other constructs (e.g., task complexity). Reliability has been assessed as sound (range = .70 to .78; Klein et al., 2001). Alpha with our sample was .84.

**Confidence regarding employability.** We used three items from the Self-perceived Employability Scale (Rothwell, Jewell, & Hardie, 2009; originally a 5-point response format), which tap the level of confidence for gaining employment. The items were “The skills and abilities that I possess are what employers are looking for”, “I am generally confident of success in job interviews and selection events”, and “I feel I could get any job so long as my as my skills and experience are reasonably relevant”. Creed and Gagliardi (2014) used these three items plus two additional ones, and reported an alpha of .75 and, in support of validity, found the items correlated positively with perceived employment demand and core self-evaluations. Alpha for the three items was .77.

**Scale validity.** Published evidence for the validity of each scale is indicated. In addition, we reviewed the scale items and concluded that they reflected the constructs being assessed
in the hypothesised model, supporting content validity of the scales. When we conducted CFAs on the scales, each scale latent variable was able to be represented by the scale items, and all scale latent variables were independent of one another, supporting construct validity. Also, supporting construct validity, correlations among the scales indicated that they related to one another in expected ways (e.g., interpersonal rejection sensitivity was related positively to career distress and negatively to employability confidence; whereas proactivity was related negatively to career distress and positively to employability confidence; See Table 1).

Procedure

The study was approved by the authors’ university ethics committee. We contacted participants using a university-wide email and directed them to an online survey, which had all questions mandated. This meant that we had no missing data, although 25 respondents (4%) were removed from the analyses as they had patterned responses (e.g., responding using all 6’s) or had withdrawn before completing the questionnaire (sample for analysis = 564). Because of the means of recruiting students, it is unknown how many received and read the email invitation. All respondents were eligible to have their name placed in a draw to win a shopping voucher.

Results

Mediation

First, we used latent variable analysis (AMOS 22) to test if career goal-performance discrepancy mediated between the two personal orientations (proactivity and interpersonal sensitivity) and the two well-being outcomes (career distress and employability confidence). Latent variable analysis was chosen as all variables can be included in the same analysis, meaning that the effects of one predictor (e.g., proactivity) can be tested while controlling for the effects of the second predictor (e.g., sensitivity; Kline, 2011). We created two multi-item parcels to represent each of the latent variables for proactivity, interpersonal rejection sensitivity, career distress, and employability confidence, and used the three individual items to represent the latent variable for employability confidence (cf. Kline, 2011; Landis, Beal, & Tesluck, 2000). There are numerous advantages to parcelling, including producing more stable parameter estimates and generating more balanced measures of a construct (Hau & Marsh, 2004; Landis, Beal, & Tesluk, 2000). To create the parcels, we ran separate exploratory factor analyses for each scale, rank ordered the items based on factor loadings, and assigned balanced high and low loading items to each parcel (Little, Cunningham, & Shahar, 2002).
We tested a measurement model to confirm that the latent variables could be represented by their parcels and then assessed the mediating role of goal-performance discrepancy. To test for mediation, we evaluated two structural models: one that assessed the direct effects (i.e., sensitivity → distress and confidence, proactivity → distress and confidence), and one that assessed both direct and indirect effects (i.e., sensitivity → discrepancy → distress and confidence, and proactivity → discrepancy → distress and confidence). We used 1000 bootstrapped samples to generate standard errors and 95% bias-corrected confidence intervals (CIs), as mediation is indicated if the CIs for the indirect effect do not include zero (Preacher & Hayes, 2008). Model fit was evaluated using chi-square ($\chi^2$; with 11 observed variables and a sample size $> 250$, a significant $\chi^2$ is expected), the standardised chi-square ($\chi^2/df < 3.0$ indicates a good fit), the Comparative Fit Index (CFI $> .95$), and the Root Mean Square Error of Approximation (RMSEA $< .07$; Hair, Black, Babin, & Anderson, 2010). No control variables were included when testing the models as the relationships between age, gender, SES, and educational achievement and the outcome variables (distress, confidence, discrepancy) were trivial (range $|.01$ to $|.12$).

The measurement model fit the data well: $\chi^2(34) = 90.46, p < .001, \chi^2/df = 2.66, CFI = .99, RMSEA = .05$. All standardized factor loadings (range $.69$ to $.98$) and correlations among the latent variables (range $.23$ to $.56$) were significant (range $p = .005$ to $p < .001$). See Table 1 for bivariate correlations and correlations among the latent variables.

For the direct effects model, $\chi^2(21) = 55.05, p < .001, \chi^2/df = 2.62, CFI = .99$, and RMSEA = .05. There were significant paths from sensitivity → distress ($\beta = .46, p < .001$), sensitivity → confidence ($\beta = -.23, p < .001$), proactivity → distress ($\beta = -.23, p < .001$), and proactivity → confidence ($\beta = .50, p < .001$), confirming that both predictor variables were associated with both outcome variables.

The indirect model also fit the data well, $\chi^2(34) = 90.46, p < .001, \chi^2/df = 2.66, CFI = .96$, and RMSEA = .05. The pathways from discrepancy to distress ($\beta = .57, p < .001$) and confidence ($\beta = -.30, p < .001$) were significant. The CIs for the indirect effects from sensitivity → distress (CI$_{95} = .14$ to $.25$), from sensitivity → confidence (CI$_{95} = -.16$ to $-.06$), from proactivity → distress (CI$_{95} = -.23$ to $-.12$), and from proactivity → confidence (CI$_{95} = .05$ to $.14$) did not contain zero, indicating discrepancy mediated between both predictors (sensitivity and proactivity) and both outcomes (distress and confidence). With the indirect paths included, the direct paths from sensitivity → distress ($\beta = .28, p < .001$), from sensitivity → confidence ($\beta = -.12, p = .01$), and from proactivity → confidence ($\beta = .42, p < .001$).
.001) remained significant, indicating these mediated relationships were partial. The path from proactivity → distress was not significant (β = -.06, p = .10), indicating full mediation. See Figure 2 for full model. The indirect effects of sensitivity on distress were 40% (total effect = .48, indirect effect = .19) and on confidence were 45% (-.22, -.10) of the total effects; the respective figures for proactivity on distress were 75% (-.23, -.17) and for proactivity on confidence were 18% (.51, .09; Shrout & Bolger, 2002). Overall, 57% of variance in distress, 42% in confidence, and 26% in discrepancy were explained by the direct and indirect effects.

**Moderated Mediation**

We used the Process bootstrapping approach (Hayes, 2013) and formally tested a series of moderated-mediation models (Process Model 7), which are reflected in Figure 1. In these models, we assessed if career goal importance (the moderator) influenced the relationship between interpersonal rejection sensitivity and proactive orientation (the predictors) and career goal-performance discrepancy (the mediator), and then tested if career goal importance moderated the indirect relationship between each predictor and the two outcome variables (career distress and employability confidence).

As seen in Table 2 (Models 1 and 2), sensitivity, proactivity, and importance were all significantly related to discrepancy, as were both interaction terms (sensitivity x importance and proactivity x importance). Simple slope tests (Aiken & West, 1991) showed, first, that career goal importance buffered the relationship between sensitivity and discrepancy, with discrepancy increasing disproportionately more as sensitivity got higher for the low goal importance group when compared to the high goal important group. Second, career goal importance also strengthened the relationship between proactivity and discrepancy, with discrepancy reducing disproportionately more for the high importance group than the low importance group as proactivity increased. See Figure 3.

Moderated mediation occurs when the strength of the indirect relationship between a predictor and an outcome variable is dependent on the level of a moderator. This is indicated when the linear correlation between the specific indirect effect and the moderator (i.e., the index of moderated mediation) differs significantly from zero (Hayes, 2015). Using the bootstrapping procedure in Process, we calculated the 95% bias-corrected confidence intervals (CIs) for each index of moderated mediation (moderated mediation exists if CIs do not include zero) and examined the size and direction of each index to assist interpretation.

When sensitivity was examined as the predictor (Table 2; Models 3 and 4), the CIs for both indices of moderated mediation did not contain zero. This indicated that the indirect relationships between sensitivity and distress and between sensitivity and confidence were
moderated by career goal importance: that is, in the indirect relationships between sensitivity and distress and between sensitivity and confidence (via discrepancy), the positive relationship between sensitivity and distress was weakened with increasing goal importance, and the negative relationship between sensitivity and confidence was weakened as goal importance increased. When proactivity was considered as the predictor (Table 2; Models 5 and 6), the negative relationship between proactivity and distress (via discrepancy) increased as goal importance increased, and the positive relationship between proactivity and confidence (via discrepancy) increased as goal importance increased. See Figure 4.

Discussion

We tested a model in which personal orientation (proactivity and interpersonal rejection sensitivity) was related to well-being (career distress and employability confidence) via career goal-performance discrepancy, and where career goal importance moderated the relationships between orientation and discrepancy, and moderated the relationships between orientation and well-being via discrepancy. First, we confirmed that career goal-performance discrepancy was associated with higher career distress (H1a) and lower perceived employability (H1b).

Goal setting theories (Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990) propose that goal-performance discrepancies result in discomfort, or worse (Fejfar & Hoyle, 2000), and this relationship has been demonstrated generally (Lord et al., 2010) and, to a lesser extent, in the career domain (Creed, Wamelink et al., 2015; Hu et al., 2016a). Our study replicated the relationship with career distress and extended the association to a broader aspect of well-being, that of context-specific (employability) confidence. These associations highlight an underlying mechanism that can explain career-related discomfort in young people. This explanation is not inconsistent with other career development theories that emphasise self-regulatory processes as a means of goal fulfilment (e.g., social-cognitive career theory, Lent, Brown, & Hackett, 1994), but it does provide young people, and those who work with them, an account by which they might understand the processes around unhappiness related to career development. Understanding these processes can then generate solutions about how to reduce the dissatisfaction; for example, based on goal adjustment and behaviour change (Lord et al., 2010). We know little about the responses to goal-performance discrepancies in the career domain, apart from stress reactions (Creed, Wamelink et al., 2015; Hu et al., 2016a), goal defending, and goal adjustment (Anderson & Mounts, 2012); nor do we clearly understand the conditions that might affect these outcomes (cf. Anderson & Mounts, 2012). Future research can contribute to theory development in this area by
identifying those variables that might ameliorate and exacerbate negative responses to career-related discrepancies.

Second, we identified that the personal orientations of proactivity and interpersonal rejection sensitivity were both associated with career goal-performance discrepancy: proactivity was associated with perceiving fewer discrepancies (H2a), interpersonal rejection sensitivity was associated with perceiving more (H2b). Goal-setting theories (Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990) propose that feedback from the environment and self-reflection, which is informed by the external feedback, generates goal-performance discrepancies. It has also been shown that personal orientations can filter and distort this feedback (van de Vliert et al., 2004). While personal orientations might influence discrepancies indirectly, we have shown that they also have a direct relationship with goal-performance discrepancy in the career domain. Proactivity is an important career-related variable associated with better well-being (e.g., Fuller & Marler, 2009) and more able career management strategies (e.g., Creed et al., 2011); whereas interpersonal rejection sensitivity is related to poorer well-being and lower levels of achievement (Harb et al., 2002; McCabe et al., 1999). Demonstrating that proactivity and interpersonal rejection sensitivity are related to goal-performance discrepancy highlights a potential avenue for understanding how these orientations are related to mental health and career outcomes in young adults. Proactive young adults might feel and do better because they perceive fewer goal-performance discrepancies, and interpersonally sensitive young people might not do as well because they inflate the number of discrepancies identified, although the causal direction of these relationships has yet to be demonstrated.

We found support for the role of career goal-performance discrepancy in the relationship between personal orientation and career-related well-being by demonstrating that discrepancy mediated the relationships between proactivity and career distress (H3a), proactivity and employability confidence (H3b), interpersonal rejection sensitivity and career distress (H3c), and interpersonal rejection sensitivity and employability confidence (H3d); all mediated relationships were partial, except for the relationship between proactivity and distress, which was full mediation. This implies that proactive young people perceive fewer career-related discrepancies, and via that, better career-related well-being, while for interpersonally sensitive young people, the reverse is true; they perceive more discrepancies, which leads them to be more distressed and to have lower confidence. This suggests that intervening with young people by directly addressing their discrepancies might benefit both proactively orientated young people (e.g., where realistic barriers are not being acknowledged) and those
who are interpersonally sensitive (e.g., they potentially see more discrepancies or barriers to progress than exist). As proactivity and interpersonal rejection sensitivity are likely to be somewhat state- and somewhat trait-like (Hemenover, 2001; Brandstädter & Rothermund, 2002), theory development around career-related discrepancies might also clarify the role of other orientations and temperaments that potentially affect goal-performance discrepancies, and as three of the four mediations were partial, other mediators along with discrepancy need to be assessed.

The relationship between personal orientation and career goal-performance discrepancy, and the mediated relationship between personal orientation and career-related well-being via career goal-performance discrepancy, were both moderated by career goal importance. First, goal importance acted to strengthen the negative relationship between proactivity and discrepancy (H4a) and weakened the positive relationship between interpersonal rejection sensitivity and discrepancy (H4b); that is, in both cases, perceived discrepancies were lower when goal importance was higher. The benefits of goal importance were also evident in the mediated relationships: when goal importance was higher, the negative relationship between proactivity and distress (H5a) and the positive relationship between proactivity and confidence were stronger (H5b), and the positive relationship between sensitivity and distress (H5c) and the negative relationship between sensitivity and confidence were weaker (H5d).

Career goal importance, which refers to commitment to a goal and the resolve to achieve it (Klein et al., 2013), has many guises, such as career salience (Savickas, 2001) and career focus (Creed, Patton, & Bartrum, 2004), and is associated with positive outcomes for young people. When considered in the context of career development, goal importance reflects young people giving priority to their occupational role, developing work-related knowledge and interests, and viewing their unfolding life as being connected to their work-life; the result of which is that young people are more likely to lead satisfying and successful lives (cf. Super, 1990). Practitioners who work with young people to assist them with their career focus and commitment can be confident that doing this will help them with their goal management by augmenting proactive and cushioning defensive personal orientations, which will have a positive flow-on effect to career-related well-being. Additionally, understanding the underlying mechanism for how goal importance works will provide insight that will allow practitioners to develop strategies for enhancing goal importance, and, thus, career-related well-being. For example, helping young people clarify their career-related goals and commit to them, and assisting them to develop goal striving strategies will allow them to better
manage and cope with negative feedback from others and self-doubts about the direction they are heading.

Theoretically, these results have identified an important moderator that operates at several places in the process between personal orientation and career-related well-being. However, we know little about the different aspects of goal importance (e.g., the commitment vs. the motivational aspects; Klein et al., 2013), and these different influences need to be teased out in future studies. While the immediate response to a negative career discrepancy is career discomfort, career discomfort triggers other career actions and behaviours. We know little about the effect of goal importance on the relationship between career goal-performance discrepancy and these actions and behaviours, which needs to be examined in the future. Only in this way will we gain a full picture of how goal importance affects the career development process.

This study identified the relationships among important career-related variables, and has generated insight into how personal characteristics are related to goal appraisals, how these appraisals are related to affective responses, and how these relationships are influenced by the importance placed on the goal. However, our study was cross-sectional, while the model we tested describes a developmental process, and longitudinal data are required before more definitive causative statements can be made. Our cross-sectional data do not allow for reverse (e.g., perceiving more discrepancies leads young people to be more interpersonally sensitive) and reciprocal (e.g., perceiving more discrepancies leads young people to be more interpersonally sensitive, and being more interpersonally sensitive leads one to perceive more discrepancies) relationships to be tested, which would be possible with data taken at multiple time points. We only assessed negative career goal-performance discrepancy, and young people also generate neutral and positive discrepancies. It will be important to understand how these interact with negative discrepancies and affect career-related well-being and actions. Regarding our sample, we had disproportionately more young women than young men, and these were drawn from a single university in one Western country. Last, we also modified the response format of some of the scales used. Before our results can be generalised, the relationships need to be assessed on other samples.

In conclusion, we applied general theories of goal setting and self-regulation (Bandura, 2001; Carver & Scheier, 1990; Locke & Latham, 1990) to test a potentially useful underlying mechanism that might explain well-being and development in the career domain. Our study supports earlier work that has assessed this mechanism for career development (e.g., Anderson & Mounts, 2012; Creed, Wamelink et al., 2015; Tsaousides & Jome, 2008) and
strengthens the link between research in the career domain and studies based in the general social science literature (e.g., Donovan & Williams, 2003). By drawing on well-tested and validated general theories, career researchers can benefit from existing knowledge bases as well as contribute to expanding these bases by systematically testing relationships that are distinctive to career development and career well-being. Understanding how these mechanisms operate in the career domain also allows practitioners and policy makers to draw on a much wider and richer store of information from the general literature that can be used to improve the life and career development of young adults.

**References**


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Figure 1. Hypothesized model: The relationship between personal orientation and well-being is mediated by career goal-performance discrepancy, and this mediated relationship is influenced by career goal importance. The two types of personal orientation (proactivity and interpersonal rejection sensitivity) were assessed separately, as were the two types of career-related well-being.
Figure 2. Career goal-performance discrepancy partially mediated between interpersonal rejection sensitivity and career distress, interpersonal rejection sensitivity and employability confidence, and proactive orientation and employability confidence, and fully mediated between proactive orientation and career distress. Standardised regression weights are reported.
Figure 4. Conditional indirect effects for (A) interpersonal rejection sensitivity on career distress, (B) interpersonal rejection sensitivity on employability confidence, (C) proactive orientation on career distress, and (D) proactive orientation on employability confidence, mediated by career goal-performance discrepancy and moderated by career goal importance. Dashed lines indicate 95% confidence bands.
Figure 3. Career goal importance moderates the relationship between interpersonal rejection sensitivity and goal-performance discrepancy (left) and between proactivity and goal-performance discrepancy (right). Solid lines indicate low importance (-1 $SD$) groups; dashed lines indicate high importance (+1 $SD$) groups.
Table 1

**Summary Data (N = 564)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>1. Interpersonal rejection sensitivity</td>
<td>27.56</td>
<td>6.92</td>
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<td>.38***</td>
<td>.45***</td>
<td>-.28***</td>
<td>-.10*</td>
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<td>2. Proactive orientation</td>
<td>21.93</td>
<td>3.77</td>
<td>-.23***</td>
<td>1.00</td>
<td>-.33***</td>
<td>-.27***</td>
<td>.45***</td>
<td>.35***</td>
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<tr>
<td>3. Goal-performance discrepancy</td>
<td>33.79</td>
<td>12.76</td>
<td>.41***</td>
<td>-.38***</td>
<td>1.00</td>
<td>.67***</td>
<td>-.43***</td>
<td>-.46***</td>
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<tr>
<td>4. Career distress</td>
<td>27.74</td>
<td>9.83</td>
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<td>-.34***</td>
<td>.70***</td>
<td>1.00</td>
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<td>-.48***</td>
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<tr>
<td>5. Employability confidence</td>
<td>13.06</td>
<td>2.48</td>
<td>-.34***</td>
<td>.56***</td>
<td>-.51***</td>
<td>-.46***</td>
<td>1.00</td>
<td>.30***</td>
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<td>6. Career goal importance</td>
<td>25.12</td>
<td>3.98</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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Note: bivariate correlations are reported above the diagonal, correlations among latent variables are below; * p < .05; *** p < .001
Table 2
Summary Data for Moderated-Mediation Models (N = 564)

<table>
<thead>
<tr>
<th>Models</th>
<th>Output</th>
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</thead>
<tbody>
<tr>
<td>Model 1: Interpersonal rejection sensitivity → Goal-performance discrepancy $R^2=0.33; F(3,560)=90.04, p&lt;.001$</td>
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<tr>
<td>Interpersonal rejection sensitivity (IP)</td>
<td>0.63***</td>
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<tr>
<td>Career goal importance (GI)</td>
<td>-1.36***</td>
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<tr>
<td>IP x GI</td>
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<tr>
<td>Model 2: Proactive orientation → Goal-performance discrepancy $R^2=0.25; F(3,560)=62.55, p&lt;.001$</td>
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<tr>
<td>Proactive orientation (PO)</td>
<td>-0.71***</td>
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<tr>
<td>Career goal importance (GI)</td>
<td>-1.26***</td>
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<tr>
<td>PO x GI</td>
<td>-0.08**</td>
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<tr>
<td>Model 3: Interpersonal rejection sensitivity → Career distress $R^2=0.49; F(2,561)=269.60, p&lt;.001$</td>
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<tr>
<td>Interpersonal rejection sensitivity</td>
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<tr>
<td>Goal-performance discrepancy</td>
<td>0.45***</td>
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<tr>
<td>Indirect effect of moderated mediation</td>
<td>-0.014 (CIs: -0.027 to -0.002)</td>
</tr>
<tr>
<td>Model 4: Interpersonal rejection sensitivity → Employability confidence $R^2=0.20; F(2,561)=71.45, p&lt;.001$</td>
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<tr>
<td>Interpersonal rejection sensitivity</td>
<td>-0.05**</td>
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<td>Goal-performance discrepancy</td>
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<td>Indirect effect of moderated mediation</td>
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<tr>
<td>Model 5: Proactive orientation → Career distress $R^2=0.45; F(2,561)=227.75, p&lt;.001$</td>
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<td>Proactive orientation</td>
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<td>Goal-performance discrepancy</td>
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<td>Indirect effect of moderated mediation</td>
<td>-0.038 (CIs: -0.066 to -0.003)</td>
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<td>Model 6: Proactive orientation → Employability confidence $R^2=0.29; F(2,561)=115.34, p&lt;.001$</td>
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<td>Proactive orientation</td>
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<td>Goal-performance discrepancy</td>
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<tr>
<td>Indirect effect of moderated mediation</td>
<td>0.005 (CIs: 0.001 to 0.009)</td>
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</tbody>
</table>

Note: Unstandardized coefficients reported. * $p < .05$; ** $p < .01$; *** $p < .001$. 

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