**Career development strategies as moderators between career compromise and
career outcomes in emerging adults**

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Abstract

We surveyed 130 first year university students (80% female; mean age 20.5 years), and assessed (a) the level of career compromise they reported between their ideal and enrolled university programs, (b) their career-related strategies, (c) their perceptions of employability, and (d) their career-related distress. We tested a model that proposed that career compromise would predict perceptions of employability and career distress, and that the effects of compromise would be moderated by the career-related strategies. Two strategies, seeking career guidance and self-presentation, moderated the relationship between compromise and career distress. There was no moderated effect for perceptions of employability, although compromise was directly associated with these perceptions. Thus, while compromise may be a normal aspect of career development, it was associated with more career distress when career development strategies were low, and associated directly with more negative employment perceptions. Practitioners might assist with career compromise by enhancing career development strategies.

Keywords: career compromise; career development strategies; perceptions of employability; career distress; career guidance; self-presentation

Introduction

Selecting a particular career path and choosing the related education and training required for that path are important career developmental tasks associated with transitioning from adolescence to adulthood (Super, Savickas, & Super, 1996). Ideally, in this process, young people identify their own interests and capabilities, match these with opportunities, and use this match to accept or discard potential occupations (cf. Parsons, 1909). Unfortunately, choosing a career might be constrained by real or imagined barriers, such as believing you don't have the ability or stamina for a particular course, or determining that there are too few openings available after qualifying. Such constraints lead young people to adjust, or compromise on, their desired career options, and accept ones that are less desirable to them (Gottfredson, 2005). Less desirable options might include choosing a pathway that is less prestigious or interesting, or is more demanding or challenging, than desired. While compromising on a desired career path might be part of the normal process of settling on a suitable career, little research has examined the consequences of this compromise (Blanchard & Lichtenberg, 2003; Tsaousides & Jome, 2008). Our study sought to extend understanding around career compromise by testing the associations between compromise and (a) career-related affect and (b) perceptions of employability, and (c) testing if career development strategies affected (i.e., moderated) the relationships between compromise and affect and perceptions of employability.

Career Compromise

The main career theory that addresses career compromise is Gottfredson's (1996) theory of circumscription and compromise, although most career theories refer to compromise. Holland's (1997) theory of personality, for example, states explicitly that

compromise is required when there is a mismatch between person and job characteristics, and Lent, Brown, and Hackett's (1994) social cognitive career theory indicates that compromise is required in the face of perceived or real barriers. Gottfredson defined career compromise as a change in occupational preferences under pressing external circumstances, and argued that career choice results from two processes. First, individuals circumscribe, or eliminate, unacceptable occupational options based on dimensions such as gender, prestige level, and interest. Second, occupational goals that have been identified as desirable might still be eliminated or modified if the individual determines they are unattainable. Circumscription is the process whereby individuals reject unacceptable career alternatives, while compromise is the process by which their most preferred options are modified or relinquished.

Gottfredson's theory is consistent with the notion of goal disruption in goal setting theory (Locke & Latham, 2002). Goal setting theory assumes that human behaviour is purposeful: people set goals, develop plans, engage in goal striving behaviours, and evaluate and adjust these behaviours depending on the progress being made. Individuals move towards attractive goals (and away from unattractive or unpleasant goals), and they sometimes have to give up or modify desired goals in the face of impediments to their attainment (Wrosch, Miller, Scheier, & de Pontet, 2007). Goal disruption can occur at the very broad level (e.g., to general life goals, such as being happy and safe), at the specific level (e.g., to studying a particular course or travelling overseas), and at the behavioural sequencing level (e.g., to routine day-to-day activities; Carver & Scheier, 1998).

Correlates of Career Compromise

Well-being. Having to modify (upwards or downwards), or relinquish, a desired goal constitutes a threat to the individual. This can be interpreted as stressful, and result in negative feelings such as loss or sadness (Carver & Connor-Smith, 2010). Stress has been defined as “the experience of encountering or anticipating adversity in one’s goal-related efforts” (Carver & Connor-Smith, 2010, p. 683). There is considerable empirical support for the notion that goal disruption is associated with poorer well-being. Goal attainment is related to greater well-being in university students (Brunstein, 1993) and adults (Harris, Daniels, & Briner, 2003), and goal disruption leads to poorer well-being in emerging adults (Schroevers, Kraaij, & Garnefski, 2007). In the career area also, goal disruption is associated with poorer well-being. Carr (1997) found that women in their mid-life who did not meet their career goals had higher levels of depression and less purpose in life than those who did. Hesketh and McLachlan (1991) found that graduate employees in the banking sector who saw their job as a compromise were less satisfied and had more negative feelings than those who did not hold their job as a compromise. Last, Tsaousides and Jome (2008), using an experimental design, found that compromise was associated with more negative affect and less positive affect and satisfaction. Based on these theoretical predictions and empirical evidence, we expected that compromise would be associated with lower levels of well-being. As we assessed context-specific career well-being, which we operationalised as career distress, our specific hypothesis was that career compromise would be associated with higher levels of career distress (Hypothesis 1).

Perceptions of employability. Apart from well-being, having to give up on or modify a desired goal might have implications for other aspects of career development. For example, it might affect young people’s level of confidence in tackling career-related

tasks, might affect the plans they make, affect risk-taking, and affect career behaviours, such as the exploration undertaken to negotiate a path to adult employment. The graduate employees in the banking industry in Hesketh and McLachlan's (1991) study differed on a range of attitudinal variables depending on whether or not they considered their work to be a compromise. Compromisers saw their job as less prestigious, less rewarding, and offering less opportunity to use their skills and abilities, and had higher turnover intentions. Ocansey (2000) found similar results. Teachers who perceived their career as a compromise expressed more frustration with the job, were less satisfied with the prestige level, and believed there was less opportunity for self-development and advancement than teachers who viewed teaching as a calling. Despite these findings for individuals already in the workforce, the relationship between career compromise and career attitudes and beliefs has not been investigated in young people prior to them entering the full-time workforce.

We investigated the relationship between career compromise and students' perceptions of their employability. Employability, at its simplest level, is the "perceived ability to attain sustainable employment appropriate to one's qualification level" (Rothwell, Jewell, & Hardie, 2009, p. 154). However, it is also an important aspect of the occupational self. It is that part which fosters adaptive cognitions, behaviours, and affect that gives confidence that the individual can negotiate the path into employment and manage the individual-work interface when he/she is employed (Fugate, Kinicki & Ashforth, 2004). In an era when there is an increasing onus on the individual to acquire, develop and manage the knowledge, skills and abilities required for successful engagement with a flexible workforce, employability has been described as the "job security of the modern

labour market” (Berntson, Sverke, & Marklund, 2006, p. 224). Consistent with the notion that compromise is associated with negative outcomes, we expected (Hypothesis 2) that compromise would be associated with lower perceptions of employability.

Third Variables

Third variables are likely to affect the relationship between career compromise and career distress, and affect the relationship between compromise and perceptions of employability. Important third variables are an individual’s coping strategies, which are the cognitive and behavioural efforts made to manage real or perceived threats (Lazarus & Folkman, 1984). Successful coping usually requires management of emotions and problem solving, as difficult situations (e.g., compromising on a career) typically involve some degree of stress. The availability of coping strategies influences how an individual appraises their situation, and how they manage it. In the career area, coping strategies have been characterised increasingly as career adaptability (Creed, Fallon, & Hood, 2009), which is defined as “the readiness to cope with the predictable [and unpredictable] tasks of preparing for and participating in the work role” (Savickas, 1997, p. 254). Gould and Penley (1984) identified a number of specific career strategies that facilitated managing career development, including creating career opportunities, working beyond traditional hours, self-promotion, seeking career guidance, networking, developing attitudes and behaviours typical of important others, and fostering links with important others. These career strategies are used more by managers (vs. non-managers) and upwardly mobile employees (vs. stagnated employees), and are positively associated with objectively-measured salary progression (Gould & Penley) and the subjective experiences of career progress (Park, 2010).

Consistent with Lazarus and Folkman's (1984) theory reflecting the interaction between the environment and the individual, participants in our study who report more use of career strategies could be expected, on the one hand, to appraise their career compromise as less threatening or demanding, and, on the other, to have a more positive psychological response to the career compromise (i.e., with regards to career distress and perception of employability) as they are better equipped with career strategies to manage the compromise. Thus, we expected that the relationship between career compromise and career distress (Hypothesis 3a), and the relationship between career compromise and perceptions of employability (Hypothesis 3b), would be moderated by having and using a repertoire of career-related strategies, with compromisers who reported higher use of career strategies reporting lower career distress and more positive perceptions of employability than compromisers with lower levels of career strategies.

We used a sample of first year university students to test the hypotheses. In Australia, university students apply for university entry in the year prior to admission. Typically, they would think about the occupations they want, explore the university courses that would progress their occupational goals, and rank order their desired courses on their application form. Thinking about, enrolling in, and commencing university studies reflects a major transition for students, and there is potential for compromise before enrolling, when enrolling, and when students have commenced their studies. For some students, the transition can be straightforward: they know the occupation they would like to follow, they have the grades to gain entry to their preferred university and program, and they have their preferences reinforced when they commence study. For many, however, the process is more complicated. Career compromise can be driven by

institutional, family, and societal barriers, as well as personal factors. Students might not be accepted into their most desired university or university course, might experience family pressure to follow a particular path, might not manage or like their course, or might develop doubts and new ideas resulting from their experiences and personal maturation (Albion, 2000), leaving them in a position of having to adjust or compromise on important previously held career goals.

Method

Participants

Participants were 130 students from a middle-ranked, public university in Australia, who completed a paper-based survey approximately 6 months into their first year of study. The sample was almost exclusively local Caucasian students, comprising 104 young women (80%) and 30 young men (20%), whose mean age was 20.5 years ($SD = 2.9$; range = 18-29). We asked them to indicate their average final year of high school grade: 18.5% indicated *very high achievement*, 58.5% indicated *high achievement*, and 20% indicated *sound achievement*. The majority (69.2%) were working part-time as well as studying full-time; 30.8% were studying full-time and not currently working.

Measures

Career compromise. We asked students to, “think about the degree you ranked as your first choice on your application to enter university”, to, “think about the job you hoped this degree would prepare you for”, and then indicate the level of perceived benefit of 15 job characteristics in relation to this “first choice” job. Job characteristics are perceived aspects of the workplace, such as how much control you have over your work flow, and the level of supervisor support (Warr, 2008). Warr (2008) suggested that job

characteristics operate like vitamins: one can have too little of a job characteristic (e.g., opportunity to develop and use skills) or too much (e.g., too much variety in the job), while some job characteristics stop having an effect once higher levels are achieved (e.g., safety). Ideal levels of job characteristics are associated with more positive work attitudes (e.g., job satisfaction, engagement, productivity); whereas, levels that are too demanding (e.g., too much supervisor feedback, too much pressure), or not sufficiently demanding (e.g., not enough challenge, insufficient responsibility), are associated with more negative work attitudes (Verquer, Beehr, & Wagner, 2003). These ratings reflect levels of perceived person-job fit related to students' first preferred occupation (Verquer et al., 2003). Sample job characteristic items were, "This job would have provided me with: ...pleasant people to work with ...a job that is interesting ...good job security ...respect ...the opportunity to make a contribution to society". Students responded on a 6-point Likert scale, which ranged from 1 = *Strongly disagree* to 6 = *Strongly agree*. We then asked students to, "think about the degree you are currently enrolled in", to, "think about the job you hope this degree will prepare you for", and to respond to the same list of job characteristics in relation to this "current choice" job. These ratings reflect perceived person-job fit related to the students' current expected occupation.

From these ratings of first choice and current expected occupations, we created job characteristic discrepancy scores by subtracting the job characteristic scores for the "current choice" job from the job characteristic scores for the "first choice" job. Treating compromise as the difference between ideal and expected job choice has been widely adopted in the career literature (Rojewski, 2007). Then, as compromise can involve expecting an occupation that offers too little of a desired job characteristic (e.g., too little

control, too little social support), as well as one that offers too much of a desired job characteristic (e.g., too much responsibility, too much social contact), we converted these individual job characteristic difference scores into absolute difference scores. Thus, as career compromise represents a deviation from the desired characteristics inherent in the students' preferred career path, we operationalised compromise as the absolute difference between the students' perceived job characteristics of their first choice occupation and the perceived job characteristics of their expected occupation.

We conducted an exploratory factor analysis on the 15 individual career compromise scores. This identified a single factor that accounted for 51% of the variance; factor loadings ranged from .44 to .86. Having identified a single factor for these scores, we used their sum as our measure of career compromise, where higher scores indicated more career compromise ($M = 5.51$; $SD = 6.59$; range = 0 to 25). The internal reliability coefficient for the 15 items was .93.

Career distress. We assessed the context-specific career domain of career distress using the 14 subjective career distress items from the Coping with Career Indecision Scale (Larson, Toulouse, Ngumba, Fitzpatrick, & Heppner, 1994). These items were designed to assess the degree of subjective career distress in relation to career decision-making and avoidance of career thought and goal setting. Sample questions were, "I often feel down or depressed about selecting a career", and, "I feel stress or pressure in selecting a satisfying career". Students responded on a 6-point Likert scale, with anchors of 1 = *Strongly disagree* and 6 = *Strongly agree*. Larson et al. reported an internal consistency coefficient of .90 for the 14 items, and demonstrated validity by assessing

correlations with standard well-being scales. The internal reliability coefficient for the current study was .94.

Perceived employability. We used the 16 item Student Self-perceived Employability Scale developed by Rothwell et al. (2009). The scale taps four domains of individual self-confidence and proactivity, engagement with study and academic performance, university reputation, and external labour market factors. Sample items were, “The skills and abilities that I possess are what employers are looking for”, “I regard my academic work as top priority”, “My university has an outstanding reputation in my field of study”, and, “There is generally a strong demand for graduates at the present time”. Students responded to these questions on a 6-point Likert scale with endpoints of 1 = *Strongly disagree* and 6 = *Strongly agree*. Rothwell et al. reported an internal reliability of .84, and demonstrated discriminant validity in relation to university commitment and ambition. The internal reliability for the present study was .86.

Career strategies. These were assessed using the 26-item Career Strategies Inventory (Gould & Penley, 1984), which has been used to measure career enhancing strategies across the seven domains of creating career opportunities, self-presentation, work involvement, seeking career guidance, opinion conformity, networking, and other enhancement. Some items were modified to make them suitable for university students who were contemplating their future career. For example, the question, “Making your boss aware of the assignments you want”, was amended to, “Making influential people aware of jobs or work experience I want”. Gould and Penly identified seven factors, and reported internal reliability coefficients ranging from of .67 to .84. When we ran a principal axis factor analysis (with direct oblimin rotation) we found three factors that

accounted for 61.4% of the variance. In this process, we deleted four items that had substantial cross-loadings with other items. We labelled the three factors as seeking career guidance strategies (7 items: factor loadings ranged from .53 to .78; sample item = “To prepare for my future career, I am getting career guidance from a more experienced person”), modelling significant others strategies (8 items: factor loadings .54 to .90; “To prepare for my future career, I am developing interests similar to those of influential people”), and self-presentation strategies (7 items: factor loadings .48 to .82; “To prepare for my future career, I am working hard when the results will be seen by those around me”). The inter-correlations among the three factors ranged from -.35 to .54; the internal reliability coefficients were .88, .92, and .86, respectively.

Procedure

The study was cross-sectional and survey based. Students were recruited from first-year university classes. They were able to take the survey with them, complete it at their leisure, and return it to the researchers. We offered students the opportunity to have their name go into a draw for a \$50 voucher as an inducement to participate. The study was conducted under the auspices of the university ethics committee.

Results

Predicting Career Distress

We used a hierarchical multiple regression analysis to test for the effects of career compromise on career distress, and test whether the career strategies moderated the relationship between compromise and career distress. None of the demographic variables (age, gender, or educational achievement) was significantly associated with the outcome variable (see Table 1); thus, to maintain power in the analysis, these were not included as

control variables. Career compromise was included at Step 1. As the career compromise variable was positively skewed (standardised skew = 6.15), we used an inverse transformation (standardised skew = .78) to ensure the compromise variable met the normality assumption for regression analysis. We reversed the signs for this variable (i.e., multiplied by -1) so that the relationships between the inverse transformed variable and the other study variables remained the same as for the untransformed variable. The three career strategies (seeking career guidance, modelling significant others, self-presentation) were included at Step 2. At Step 3, we included, in turn, the three interaction terms of career compromise x seeking career guidance, career compromise x modelling significant others, and career compromise x self-presentation. To avoid multicollinearity, the interaction terms were created using standardised scores (Miles & Shevlin, 2004). Summary data and inter-correlations among all variables are reported in Table 1. Summary data for the hierarchical regression analyses are reported in Table 2.

Insert Table 1 and Table 2 about here

Career compromise at Step 1 accounted for 7.3% of the variance in career distress, $F(1, 128) = 10.07, p < .01$. The addition of the three career strategies at Step 2 accounted for an additional 8.5%, $F_{Change}(3, 125) = 4.19, p = .01$. At Step 2, self-presentation strategies ($\beta = -.28; p = .01, sr^2 = 4.8\%$) and career compromise ($\beta = .21; p = .02, sr^2 = 4.0\%$) accounted for unique variance, with less use of self-presentation and more compromise associated with more career distress. Two interaction terms accounted for additional variance: career compromise x seeking career guidance, $F_{Change}(1, 124) = 5.94, p = .02$, and career compromise x self-presentation, $F_{Change}(1, 124) = 4.71, p = .03$. The

third interaction term, career compromise x modelling significant others, approached significance ($p = .06$).

We followed the procedures recommended by Aiken and West (1991) and graphed the significant interaction effects to facilitate interpretation. We used the computation tool provided by Preacher, Curran, and Bauer (2006) to generate simple regression equations based on values of the moderator at the mean, and at 1 *SD* above and below the mean. The significant career compromise x seeking career guidance strategies interaction indicated that there was little change in career distress as career compromise increased for those with high seeking career guidance strategies. However, for those with low seeking career guidance strategies, as levels of compromise increased, so too did levels of career distress. See Figure 1. Similarly, for the significant career compromise x self-presentation interaction, there was little change in career distress levels as career compromise increased for those with high self-presentation strategies. However, when self-presentation was low, as levels of compromise increased, so too did levels of career distress. See Figure 2.

Insert Figure 1 and Figure 2 about here

Predicting Perceptions of Employability

We repeated the regression analysis with perceived employability as the outcome variable. Again, the demographic variables were not significantly associated with the outcome variable, and were not controlled. Career compromise at Step 1 accounted for 7.1% in perceived employability, $F(1, 128) = 9.85, p < .01$. The three career strategies at Step 2 accounted for an additional 20.4%, $F_{Change}(3, 125) = 11.75, p < .001$. At Step 2, career compromise ($\beta = -.19; p = .02, sr^2 = 3.4\%$), modelling significant others, ($\beta = .20;$

$p = .03$, $sr^2 = 3.0\%$), and seeking career guidance ($\beta = .22$; $p = .03$, $sr^2 = 2.8\%$) accounted for unique variance, with less compromise and more use of modelling and career guidance seeking strategies being associated with higher perceptions of employability. No interaction term was significant. See Table 2.

Discussion

We tested three hypotheses. First, that career compromise would be positively associated with career distress; second, that compromise would be negatively associated with perceptions of employability; and third, that career specific strategies would moderate the relationship between career compromise and career distress (Hypothesis 3a), and moderate the relationship between compromise and perceptions of employability (Hypothesis 3b). For the latter hypothesis, we expected that those who reported more career strategies to also report less career distress and higher perceptions of employability.

Supporting Hypotheses 1 and 2, we found that career compromise was associated with career distress and perceived employability in the expected directions. These are important findings, as they add to the limited research that has examined compromise in early adults when they are in the process of deciding on their career path. These findings contribute to our understanding of career development by demonstrating that career compromise can be considered a correlate of context-specific career well-being in university students, and considered a correlate of an important aspect of students' occupational self, that of their perceptions of their own employability. Thus, while career compromise might be viewed as part of the normal career development process of choosing an adult occupation (Gottfredson, 1996, 2005), it might not always be

psychologically neutral for the individual. Practitioners need to be alert to the possibility that some students who have compromised, or who are in the process of compromising, might need assistance maintaining their well-being and/or career confidence.

Interpretation of the relationship between career compromise and career distress (but not between compromise and perceptions of employability) needs to be qualified by the significant interaction effects that were found. Partially supporting Hypothesis 3, we found that career strategies moderated the relationship between career compromise and career distress (Hypothesis 3a; although there was no support for Hypothesis 3b, that career strategies would moderate the relationship with perceptions of employability). Specifically, students who reported higher levels of seeking career guidance strategies and higher levels of self-presentation strategies reported lower levels of career distress at all levels of compromise, whereas students with lower levels of seeking career guidance strategies and lower self-presentation strategies reported higher career distress as the level of compromise increased. This suggests that career strategies buffer the negative effect of compromise on well-being; that is, students with more career strategies do better when compromise is high, whereas students with fewer career strategies do more poorly. The implication here is, if career compromise is to be considered normative in the career development area (Gottfredson, 1996, 2005), then it might be more problematic when young people do not have the coping skills and strategies to help them manage the setbacks they encounter.

Our results suggest that some protection against career distress might be gained if students have well developed career strategies (in this case, career guidance seeking and self-presentation strategies). These results are consistent with previous studies that

demonstrated that career adaptability strategies benefit the individual (Creed et al., 2009), and reinforce the notion that career-focused strategies (whether they be identified as career adaptable, self-regulatory, or career development strategies) are important skills in the career domain. Assisting students to understand the value of self-presentation strategies, and helping them develop functional self-presentation attitudes and skills (e.g., developing interpersonal micro-skills, building a network of contacts, presenting themselves strategically in relation to dress and attitude), should assist students to better manage career compromise and its consequences. Similarly, developing students' confidence and skills to access career-related information and advice (e.g., through identifying and accessing personal contacts and professionals who can help, undertaking work experience, identifying resources for helpful information) should be helpful, especially in situations of compromise.

We found no support for Hypothesis 3b, that the career strategies would moderate the relationship between career compromise and perceptions of employability. Career compromise was directly, negatively associated with perceptions of employability, supporting Hypothesis 2, and, in addition, two career strategies (seeking career guidance and modelling significant others) were positively associated with these perceptions. For young people, having a positive view of their current and future employability is important if they are to develop the confidence and skills to negotiate the transition from education to today's workforce. In adults, perceptions of employability have been shown to be related to labour-market conditions (e.g., the more jobs available, the higher perceptions of employability; Berntson, Sverke, & Markland, 2006), human capital (e.g., education and training; Berntson et al., 2006), person-centred variables (e.g., flexibility;

Chan, 2000) and environmental setbacks (Ashford & Taylor, 1990). Consistent with this previous research, we found that a setback in the form of a career compromise was associated with reduced perceptions of employability, and that human capital in the form of career strategies was associated with more positive perceptions.

Practitioners working with university students, as well as educational institutions such as universities and colleges, should be aware that educational/occupational pathway disruptions might be associated with more negative occupational attitudes. Our results suggest that helping students manage their career disruptions (e.g., by providing easy access to occupational information and advice to assist them to re-engage in comparable new career goals), foster positive occupational attitudes (e.g., by embedding career pathway information and activities in curricula), and enhance their career strategies (e.g., by offering career-related training in areas such as job search and CV preparation) is likely to benefit students generally, and specifically benefit students who face disruption with already reduced attitudes and poorer strategies. Interventions that target such attitudes and skills might, for example, prevent students from dropping out of post-secondary education because early experiences did not go as planned. As employability is a complex psycho-social construct comprising person and situational factors (Fugate, Kinicki, & Ashforth, 2004), future studies might assess which other career-related variables are associated with perceptions of employability, and to what extent these interact with person and environmental variables in the process.

We found no associations for gender or age. Gottfredson (1996) identified gender as an important influence on career development, with young people protecting core career dimensions such as gender-role orientation, which is integral to the self-concept. It was a

limitation of our study that the sample was predominantly young women, so future research should test for gender differences in career compromise situations. Young women typically report poorer well-being than young men (Horstmanshof, Punch, & Creed, 2008), and there are gender differences in career adaptability strategies (Hirschi, 2009); thus, there might be different correlates of compromise for young men and women. For age, Wrosch, Scheier, Miller, Schulz, and Carver (2003), found that young people (up to the age of 35 years) were less distressed than older people when having to disengage from an important goal and re-engage in a new one. Thus, age might also moderate the effects of compromise. Our sample was of early adults and the results might not apply to older adults, who, for example, might have to compromise or modify goals in the workplace.

Further, our study was cross-sectional. While we proposed a plausible directional model, only longitudinal data can confirm that poorer well-being and more negative occupational attitudes result from having to compromise. It might be, for example, that students with poorer well-being and lower perceptions of their employability are more likely to place themselves in situations where they have to modify or compromise their goals. Poorer well-being at school, for example, has been shown to be related to labour market disadvantage for adolescents in the transition from school-to-work (Creed, Muller, & Patton, 2003). Cross-sectional models also cannot determine whether there are changes over time for any of the variables. We assessed career compromise at the early stages of the students' university degree. It might be that the effects of compromise are more severe closer to the compromise event, or less severe after students had more experience at university. While we identified several adaptive/coping career strategies

that moderated the effects of the compromise, other studies should test which additional strategies are useful in this role. It should be noted also that we reduced the career strategies scale from 26 to 22 items as a result of the factor analysis. While this was justified statistically, it does limit generalising the results to other samples. Participants in our study were students at one university. Future studies should assess more heterogeneous samples, both student and non-student samples, and test what strategies are useful for which samples of young people. Desirably, future studies would also include reports from others, as our data were all self-reports from the students themselves. Finally, our study suggested that the process of compromising on, or modifying, career goals can be associated with negative effects for some young people. Career theories need to acknowledge this possibility more overtly and accommodate these events when explaining career development.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, London, UK: Sage.
- Albion, M. J. (2000). Career decision making difficulties of adolescent boys and girls. *Australian Journal of Career Development*, 9, 14-19. Retrieved from <http://www.acer.edu.au/press/ajcd>
- Ashford, S. J., & Taylor, M. S. (1990). Adaptation to work transitions: An integrative approach. In G. R. Ferris & K. M. Rowland (Eds.), *Research in personnel and human resources management* (Vol. 8, pp. 1-39). Greenwich, CT: JAI Press.

- Berntson, E., Sverke, M., & Marklund, S. (2006). Predicting perceived employability: Human capital or labour market opportunities. *Economic and Industrial Democracy*, 27, 223-244. doi:10.1177/0143831X06063098
- Blanchard, C. A., & Lichtenberg, J. W. (2003). Compromise in career decision making: A test of Gottfredson's theory. *Journal of Vocational Behavior*, 62, 250–271. doi:10.1016/S0001-8791(02)00026-X
- Brunstein, J. C. (1993). Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, 65, 1061-1070. doi:10.1037/0022-3514.65.5.1061
- Carr, D. (1997). The fulfilment of career dreams at midlife: Does it matter for women's mental health. *Journal of Health and Social Behavior*, 38, 331-44. Retrieved from <http://hsb.sagepub.com/>
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61, 679-704. doi:10.1146/annurev.psych.093008.100352
- Carver, C. S., & Scheier, M. F. (1998). *On the self regulation of behavior*. New York, NY: Cambridge University Press.
- Chan, D. (2000). Understanding adaptation to changes in the work environment: Integrating individual difference and learning perspectives. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 1-42). Stamford, CT: JAI Press.
- Creed, P. A., Fallon, T., & Hood, M. (2009). The relationship between career adaptability, person and situation variables, and career concerns in young adults. *Journal of Vocational Behavior*, 74, 219-229. doi:10.1016/j.jvb.2008.12.004

- Creed, P. A., Muller, J., & Patton, W. (2003). Leaving high school: The influence and consequences for psychological well-being and career-related confidence. *Journal of Adolescence*, 26, 295-311. doi:10.1016/S0140-1971(03)00015-0
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14-38. doi:10.1016/j.jvb.2003.10.005
- Gottfredson, L. S. (1996). Gottfredson's theory of circumscription and compromise. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 179-132). San Francisco, CA: Jossey- Bass.
- Gottfredson, L. S. (2005). Applying Gottfredson's theory of circumscription and compromise in career guidance and counseling. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 71-100). New York: Wiley.
- Gould, S., & Penley, L. E. (1984). Career strategies and salary progression: A study of their relationship in a municipal bureaucracy. *Organizational Behavior and Human Performance*, 34, 244-265. Retrieved from <http://ees.elsevier.com/obhdp/>
- Harris, C., Daniels, K., & Briner, R. B. (2003). A daily diary study of goals and affective well-being at work. *Journal of Occupational and Organizational Psychology*, 76, 401-410. doi:10.1348/096317903769647256
- Hesketh, B., & McLachlan, K. (1991). Career compromise and adjustment among graduates in the banking industry. *British Journal of Guidance & Counselling*, 19, 191- 208. doi:10.1080/03069889108253602

- Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior*, 74, 145-155. doi:10.1016/j.jvb.2009.01.002
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments*. Odessa, FL: Psychological Assessment Resources.
- Horstmanshof, L., Punch, R., & Creed, P. A. (2008). Environmental correlates of wellbeing among final-year high school students. *Australian Journal of Psychology*, 60, 101 – 111. doi:10.1080/00049530701477746
- Larson, L. M., Toulouse, A. L., Ngumba, W. E., Fitzpatrick, L. A., & Heppner, P. P. (1994). The development and validation of coping with career indecision. *Journal of Career Assessment*, 2, 91-110. doi:10.1177/106907279400200201
- Lazarus, R. S., & Folkman, S. (1984b). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance [Monograph]. *Journal of Vocational Behavior*, 45, 79-122. Retrieved from <http://ees.elsevier.com/jvb/>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705–717. doi:10.1037//0003-066X.57.9.705
- Miles, J., & Shevlin, M. (2004). *Applying multiple regression and correlation*. London, UK: Sage.

- Ocansey, F. (2000). Career compromise and adjustment among non-professional graduate teachers. *Ife Psychologia*, 8, 84-95. Retrieved from <http://ajol.info/index.php/ifep/index>
- Park, Y. (2010). The predictors of subjective career success: An empirical study of employee development in a Korean financial company. *International Journal of Training and Development*, 14, 1-15. doi:10.1111/j.1468-2419.2009.00337.x
- Parsons, F. (1909). *Choosing a vocation*. Boston, MA: Houghton Mifflin.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437-448. Retrieved from <http://www.jstor.org/stable/4122453>
- Rothwell A., Jewell S., Hardie M., (2009), Self-perceived employability: investigating the responses of post graduate students, *Journal of Vocational Behavior*, 75, 152-161. doi:10.1016/j.jvb.2009.05.002
- Rottinghaus, P. J., Day, S. X., & Borgen, F. H. (2005). The Career Futures Inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment*, 13, 3-24. doi:10.1177/1069072704270271
- Rojewski, J. W. (2007). Occupational and educational aspirations. In V. B. Skorikov & W. Patton (Eds.). *Career development in childhood and adolescence* (pp. 87-104). Rotterdam, The Netherlands: Sense Publishing.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45, 247-259. Retrieved from <http://associationdatabase.com/aws/NCDA/pt/sp/cdquarterly>

- Schroevers, M., Kraaij, V., & Garnefski, N. (2007). Goal disturbance, cognitive coping strategies, and psychological adjustment to different types of stressful life events. *Personality and Individual Differences*, 43, 413-423. doi:10.1016/j.paid.2006.12.009
- Super, D. E., Savickas, M. L. & Super, C. M. (1996). The life-span, life-space approach to careers. In D. Brown, L. Brooks & Associates, *Career choice & development* (pp. 121-178). San Francisco, CA: Jossey-Bass.
- Tsaousides, T., & Jome, L. (2008). Perceived career compromise, affect and work-related satisfaction in college students. *Journal of Vocational Behavior*, 73, 185-194. doi:10.1016/j.jvb.2008.04.003
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63, 473-489. doi:10.1016/S0001-8791(02)00036-2
- Warr, P. B. (2008). *Work, happiness and unhappiness*. Mahwah, NJ: Lawrence Erlbaum.
- Wrosch, C., Miller, G. E., Scheier, M. F., & de Pontet, S. B. (2007). Giving up on unattainable goals: Benefits for health? *Personality and Social Psychology Bulletin*, 33, 251-265. doi:10.1177/0146167206294905
- Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R., & Carver, C. S. (2003). Adaptive self-regulation of unattainable goals: Goal disengagement, goal reengagement, and subjective well-being. *Personality and Social Psychology Bulletin*, 29, 1494-1508. doi:10.1177/0146167203256921

Figure 1. Seeking career guidance strategies moderating the relationship between career compromise and career distress. Higher scores on the y-axis indicate more distress.

Figure 2. Self-presentation strategies moderating the relationship between career compromise and career distress. Higher scores on the y-axis indicate more distress.

Table 1
Summary Data and Inter-correlations Among all Variables; $N = 130$.

Variables	<i>M</i>	<i>SD</i>	Range	1	2	3	4	5	6	7	8	9
1. Career compromise ^a	5.51	6.60	0-25	1	.27**	-.27**	-.21*	-.04	-.18*	.07	.07	.15
2. Career distress	40.40	14.28	14-72		1	-.16	-.24**	-.06	-.32***	-.07	.06	-.02
3. Perceived employability	65.76	8.97	43-87			1	.44***	.38***	.39***	.02	-.04	-.16
4. Seeking career guidance strategy	29.60	6.40	12-42				1	.49***	.59***	-.06	.05	-.31***
5. Modelling significant others strategy	23.71	8.15	8-48					1	.44***	-.06	.15	-.19*
6. Self-presentation strategy	28.52	5.83	13-41						1	-.01	-.02	-.15
7. Age	20.48	2.93	18-29							1	.08	.36***
8. Educational achievement	2.02	.65	1-4								1	-.01
9. Gender ^b	-	-										1

^a = *M*, *SD*, and Range are based on untransformed data; correlations are based on transformed data. ^b = All correlation are Pearson's *r*, except for those with gender, which are Spearman's rho. Men were coded 1, women 0. * = $p < .05$; ** = $p < .01$; *** = $p < .001$

Table 2
Summary of Hierarchical Multiple Regression Analyses for Variables Predicting Career Distress and Perceived Employability; N = 130.

Variables	Career Distress				Perceived Employability			
	ΔR^2	<i>B</i>	<i>SEB</i>	β	ΔR^2	<i>B</i>	<i>SEB</i>	β
Step 1	.07**				.07**			
Career compromise (CC)		62.02	19.54	.27**		-38.57	12.29	-.27**
Step 2	.09**				.20***			
Seeking career guidance strategies (SCG)		-.19	.24	-.09		.31	.14	.22*
Modelling significant others strategies (MSO)		.20	.17	.11		.22	.10	.20*
Self-presentation strategies (SPS)		-.68	.26	-.28**		.21	.15	.14
Step 3	.04*				.01			
CC x SCG		-2.89	1.19	-.21*		-.93	.70	-.11
Step 3	.02				.01			
CC x MSO		-2.27	1.20	-.16		-1.00	.71	-.11
Step 3	.03*				.02			
CC x SPS		-2.63	1.21	-.18*		-1.14	.71	-.12

* = $p < .05$, ** = $p < .01$, *** = $p < .001$