Investigating the link between trait emotional intelligence, career indecision, and self-perceived employability: The role of career adaptability☆

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ABSTRACT

Trait emotional intelligence (TEI) is emerging as a useful and promising individual difference in predicting vocational behavior (e.g., Di Fabio & Saklofske, 2014). Little is yet known about the underlying processes that may lead TEI to associate with career related outcomes. This study investigates the role of career adaptability in mediating the association between TEI and career decision-making difficulties and self-perceived employability, in a sample of Swiss university students ($N = 400$). The results of a series of path analysis in which we controlled for intelligence, sex and personality showed that career adaptability fully mediated the effect of TEI on self-perceived employability and career decision-making difficulties, in particular the subscales of lack of information and inconsistent information. Our findings shed light on the role of regulatory processes in shaping the effects of TEI on career-related outcomes.

1. Introduction

Our contemporary globalized world involves managing increasingly uncertain professional trajectories (Guichard, 2015), and career uncertainty is known to be associated with higher anxiety (Fuqua, Seaworth, & Newman, 1987). In this context, a better understanding of one's emotional experience has been found to play an important role in career-related issues (e.g., Di Fabio & Saklofske, 2014). However, little is still known about the affective components that may impact the process of career exploration and career development.

The aim of this study is to understand the pathway through which emotional self-perceptions representing the affective aspects of personality, i.e., trait emotional intelligence (TEI; Petrides, Pita, & Kokkinaki, 2007), may affect career related outcomes, such as career indecision and self-perceived employability. TEI, defined as the emotional traits that reflect self-perceptions regarding one's ability to deal with emotions, is associated with important career related outcomes including career indecision, career indecisiveness and career decision-making self-efficacy (Di Fabio & Saklofske, 2014), with self-perceived employability (Di Fabio & Kenny, 2015), and in predicting career

success (De Haro García & Castejón Costa, 2014).

The path through which TEI and career indecision and self-perceived employability are related, however, remains unexplored in the literature, with no study to our knowledge yet investigating the mediating paths between these variables. Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) posits that the relationship between dispositions and career choice is not direct, but mediated by internal processes, such as self-efficacy. Similarly, Rossier (2015) highlights the role of regulatory processes, including career adaptability, in mediating the relationship between individual dispositions and career behaviors. Interestingly, regulatory processes have a strong adaptive function in allowing dispositions to fit the characteristics of the environment.

1.1. Career adaptability, career indecision and self-perceived employability as career-related outcomes

Studies indicate the potential for TEI to have an indirect effect on career indecision and self-perceived employability through career adaptability (Coetzee & Harry, 2014; Harry, 2017). Career adaptability

refers to a set of personal resources that help individuals manage career transitions (Savickas & Porfeli, 2012). Some studies have highlighted the association between career adaptability and career decision-making difficulties (e.g., Hirschi, Herrmann, & Keller, 2015). A recent meta-analysis (Rudolph, Lavigne, & Zacher, 2017) showed career adaptability to be significantly associated with employability. Of note, no studies explored the possible mediator effect of career adaptability on the relationship between TEI and career related outcomes. We posit that the psychosocial resources of career adaptability may account for the effect of trait emotional intelligence on career-related outcomes.

To explore the mediating role of career adaptability we chose two career-related constructs to capture the more negative and more positive aspects of transition to employment: career decision-making difficulties (Gati, Krausz, & Osipow, 1996), more generally termed career indecision, and self-perceived employability. Previous work has primarily emphasized the cognitive aspects of career indecision (e.g., Gati & Tal, 2008). Some authors have also identified its affective aspect: Betz and Sterling (1993) found that chronic career indecisiveness was strongly correlated with fear of commitment to a decision, an affective disposition. Saka and Gati (2007) found emotional and personality-related factor affecting severe career decision-making difficulties.

Self-perceived employability is defined as the characteristics needed to secure a job that corresponds to one's interests and goals (Rothwell & Arnold, 2007). Indeed, self-perceived employability appears to be related to higher job satisfaction, higher work engagement (Ngo, Liu, & Cheung, 2017), and higher perceived marketability (De Vos, De Hauw, & Van der Heijden, 2011). Overall, both career indecision and self-perceived employability capture fundamental aspects of career-related outcomes, and may help elucidate the role of TEI and career adaptability in contributing to career development.

1.2. Personality, intelligence and sex

The Big Five personality traits have been shown to associate with TEI (Saklofske, Austin, & Minski, 2003) and with career adaptability, especially conscientiousness (Rudolph et al., 2017). Although previous studies have established no significant effects of fluid intelligence on career decision (Di Fabio & Saklofske, 2014), this variable logically could affect career adaptability. Sex also may impact TEI (Petrides, Furnham, & Martin, 2004), although previous studies have shown no effects of sex on career adaptability (Rudolph et al., 2017).

1.3. The present study

Based on the framework delineated above, the present study examined the indirect effect of TEI on career indecision making difficulties and self-perceived employability through career adaptability, controlling for personality traits, fluid intelligence, and sex. The strong association between career indecision and emotional intelligence is widely acknowledged in the literature, although no study to our knowledge has looked at the process that may explain this association. Furthermore, self-perceived employability is a key element for career development and success that has not been much studied in relation to TEI. We hypothesized that career adaptability would fully mediate the relationship between TEI and career indecision, including its 3 subscales (H1) and between TEI and self-perceived employability (H2).

2. Method

2.1. Participants

We recruited 400 participants (46% female), ranging in age from 17 to 48 (*Mean* = 21.39 and *SD* = 3.27) from several universities in the Lausanne area (Switzerland) through the university subject-pool. Participants were bachelor (69,8%) and master or advance studies students (30,2%) in various disciplines. They gave written consent to participate in the study and were compensated for their participation.

2.2. Measures

2.2.1. Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF)

The Trait Emotional Intelligence Questionnaire-Short Form (Cooper & Petrides, 2010) is a 30-item self-report questionnaire that measures TEI using a Likert scale ranging from 1 = 'strongly disagree' to 7 = 'strongly agree'. Cronbach reliability for the total score in the current sample was 0.83.

2.2.2. Career Adapt-Abilities Scale (CAAS)

The Career Adapt-Abilities Scale (Savickas & Porfeli, 2012) includes 24 items equally divided into 4 subscales measuring resources of concern, control, curiosity, and confidence. Participants rate how strongly they have developed these resources on a Likert scale ranging from 1 = 'I don't have this ability', to 5 = 'I have a very strong ability'. We employed the total score for the analysis as the literature shows that the 4 subscales load into a single second-order factor (Savickas & Porfeli, 2012). Cronbach reliability for the total score in the current sample was 0.91.

2.2.3. Career Decision-making Difficulties Questionnaire (CDDQ)

The Career Decision-making Difficulties Questionnaire (Gati et al., 1996) includes 34 items, but in this study only 32 were used due to a technical problem with the administration of items 27 and 29, which were part of the 'inconsistent information' subscale. The two missing items did not seem to significantly affect the subscale score and reliability. We employed the total score and the scores of the three subscales (lack of readiness, lack of information, inconsistent information) in the statistical analysis. The Likert scale ranges from 1 = 'Does not describe me' to 9 = 'Describes me well'. Cronbach reliability in the current sample for the total score was 0.92, 0.61 for lack of readiness, 0.93 for lack of information, and 0.83 for inconsistent information.

2.2.4. Self-Perceived Employability Scale (SPES)

The Self-Perceived Employability Scale for university students (Rothwell, Jewell, & Hardie, 2009) is a 16-item scale used to evaluate expectations and self-perceptions of employability in university students. An example item is: "The skills and abilities that I possess are what employers are looking for". The Likert scale ranges from 1 = 'strongly disagree' to 7 = 'strongly agree'. Cronbach reliability in this sample for the total score was 0.87.

2.2.5. Raven's Standard Progressive Matrices (RPM)

Raven's Standard Progressive Matrices (Raven, 1938) were used to assess cognitive abilities, especially to evaluate fluid intelligence. The test is composed of five sets (A to E) of 12 multiple-choice, progressively more difficult items (60 total). The test administration was time-limited to 20 min. Cronbach reliability of the total score in the current sample was 0.88.

2.2.6. Brief HEXACO Inventory (BHI)

The Brief HEXACO Inventory is a 24-item questionnaire that assesses six personality dimensions: Honesty, emotionality, extraversion, agreeableness, conscientiousness, and openness (De Vries, 2013). The HEXACO model is an acknowledged measure of personality that proved to be a valid and reliable indicator of the major personality traits (e.g., Ashton & Lee, 2009). The brief version of the questionnaire showed adequate levels of test-retest reliability and high convergence with the longer HEXACO measure (De Vries, 2013). Participants respond to self-reflective items using a Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Alpha reliabilities of the dimensions in the brief version of the questionnaire range from 0.43 and 0.72 (De Vries, 2013). The Honesty scale was not included in the analytic model as we did not have any hypothesis regarding its relationship with TEI.

2.3. Procedure

The data presented here were collected as part of a larger project on the investigation of emotional competencies, intelligence, and performance. Students from several French-speaking Swiss universities participated by filling out questionnaires both online and in a lab session. The scores of trait EI and personality were collected through an online survey filled out up to seven days before the lab session. The scores of career adaptability, fluid intelligence, career indecision and self-perceived employability were collected during the lab session. Only 308 participants completed this questionnaire online, as it was added at a second stage of the data collection.

2.4. Statistical analysis

To test the fit of the data, structural equation modeling for path analyses were conducted using Stata 14 (StataCorp, 2015) with maximum likelihood estimation; path coefficients of direct and indirect effects were estimated using Z-tests. Five separate path models testing full mediation were fitted: the first four with trait emotional intelligence as the predictor, career adaptability as the mediator, and career decision-making difficulties (total score and scores on the 3 subscales) as the outcome, and the fifth with the same predictor and mediator, but with the outcome of self-perceived employability. Each model was compared with a partial mediation model for comparative purposes.

Sex, personality traits, and general intelligence were added as control variables in both models. Because the mediator was measured and not manipulated in our study, the mediator and the dependent variables might share some common causes; we therefore employed the instrumental variable method to account for potential endogeneity problems (Antonakis, Bendahan, Jacquart, & Lalive, 2010), allowing covariance between the standard error of the mediator and of the outcome. We requested standardized solutions, thus the reported values are beta coefficients. Overall R^2 was also computed for each model. The following fit indices were used: chi-square test statistic (χ^2), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). If the CFI value was 0.90 or above, the TLI values were above 0.95, the SRMR and the RMSEA values were 0.08 or less, the model was considered to have an acceptable fit (Cheung & Rensvold, 2002; Hu & Bentler, 1999).

3. Results

The means, standard deviations, and correlations of the variables used are shown in Table 1. As scores on agreeableness were not correlated with emotional intelligence, we did not include it as a control variable in the final model. The Shapiro-Wilk normality test showed that the scores on CAAS, CDDQ (total score and lack of readiness), and SPES were normally distributed.

3.1. Results regarding career indecision

We tested a full mediation model in which career adaptability fully mediated the relationship between trait emotional intelligence and career decision-making difficulties, after controlling for the effect of sex, intelligence, and personality traits on TEI and career adaptability. Overall, the model showed satisfactory fit, $\chi^2(6) = 12.29$, $p = .056$; RMSEA = 0.058; SRMR = 0.020; CFI = 0.975; TLI = 0.938, $R^2 = 0.50$. Because we observed that the effects of almost all control variables on career adaptability except conscientiousness were not significant, we created an alternative full mediation trimmed model (see Table 2) where only the path from conscientiousness to career adaptability was retained. A Chi-square test for model comparison indicated that the trimmed model had the same predictive power as the model including the regression paths from all control variables, $\Delta\chi^2(5) = 6.73$,

$p = .241$. We therefore retained the most parsimonious model with the regression path from conscientiousness to career adaptability only, for the rest of our analyses and for all tested models (Fig. 1).

The comparison of the Chi-square test between the full mediation (trimmed) model and the partial mediation model (with a direct path from trait emotional intelligence and career decision-making difficulties) indicated no significant differences, $\Delta\chi^2(1) = 3.53$, $p = .060$ (see Table 2), and supported a full mediation. This result highlights the importance of career adaptability in totally accounting for the relationship between TEI and career decision-making difficulties. TEI had a significant indirect effect on career decision-making difficulties through career adaptability, $\beta = -0.39$, $Z = -8.19$, $p < .001$.

3.1.1. Results regarding career indecision's subscales

We tested three different models in which career adaptability fully mediated the relationship between TEI and each of the CDDQ's subscales (lack of readiness, lack of information, and inconsistent information). Overall, the model with *lack of readiness* as dependent variable showed close to acceptable fit, $\chi^2(11) = 28.66$, $p = .003$; RMSEA = 0.072; SRMR = 0.032; CFI = 0.919; TLI = 0.890, $R^2 = 0.46$. A Chi-square test for model comparison between the full mediation model and the partial mediation model (with a direct path from TEI to lack of readiness) indicated a significant difference, $\Delta\chi^2(1) = 5.49$, $p = .019$—the partial mediation model had better predictive power and showed better fit indices. TEI had a direct effect on lack of readiness ($\beta = -0.33$, $Z = -2.46$, $p = .014$), but the indirect effect was not anymore significant.

The model with *lack of information* as a dependent variable showed a good fit to the data, $\Delta\chi^2(11) = 15.19$, $p = .174$; RMSEA = 0.035; SRMR = 0.021; CFI = 0.983; TLI = 0.977, with an R^2 of 0.47. A Chi-square test for model comparison between the full and the partial mediation model (with a direct path from trait emotional intelligence to lack of information) showed no significant difference between the two, $\Delta\chi^2(1) = 3.54$, $p = .060$, supporting a full mediation. TEI also had a significant indirect effect on lack of information through career adaptability ($\beta = -0.38$, $Z = -8.03$, $p < .001$).

The model with *inconsistent information* as dependent variable showed a good fit to the data, $\chi^2(11) = 14.74$, $p = .195$; RMSEA = 0.033; SRMR = 0.022; CFI = 0.983; TLI = 0.977, with a R^2 of 0.48. A Chi-square test for model comparison between the full and the partial mediation model (with a direct path from TEI to inconsistent information) showed no significant difference between models, $\Delta\chi^2(1) = 0.20$, $p = .658$—the full mediation model has the same predictive power as the partial mediation model. TEI also had, a significant indirect effect on inconsistent information through career adaptability ($\beta = -0.31$, $Z = -6.69$, $p < .001$).

3.2. Results regarding self-perceived employability

Similar to the previous model, we tested a model in which career adaptability fully mediated the relationship between TEI and self-perceived employability, after controlling for the effect of conscientiousness on career adaptability. Overall, this model showed satisfactory fit, $\chi^2(11) = 29.30$, $p = .002$; RMSEA = 0.064; SRMR = 0.026; CFI = 0.945; TLI = 0.924, with an R^2 of 0.44.

A Chi-square test for model comparison between the full and the partial mediation model (with a direct path from trait emotional intelligence to self-perceived employability) showed no significant difference between the models, $\Delta\chi^2(1) = 0.14$, $p = .709$. This result further highlights the importance of career adaptability in the relationship between TEI and self-perceived employability, confirming the full mediation effect of career adaptability (Fig. 2).

TEI also had a significant indirect effect on self-perceived employability through career adaptability ($\beta = 0.30$, $Z = 7.56$, $p < .001$).

Table 1

Means, standard deviations, and correlations.

	N	Mean	SD	TEI	CAAS	CDDQ	LR	LI	II	SPES	RPM	Em	Ex	A	C	O	Sex
TEI	400	4.80	0.58	1													
CAAS	400	3.71	0.53	0.60***	1												
CDDQ	308	4.25	1.19	−0.46***	−0.38***	1											
LR	308	4.75	0.98	−0.33***	−0.24***	0.76***	1										
LI	308	4.18	1.73	−0.45***	−0.40***	0.92***	0.53***	1									
II	308	3.59	1.51	−0.35***	−0.27***	0.84***	0.51***	0.68***	1								
SPES	400	4.91	0.81	0.34***	0.44***	−0.17**	−0.06	−0.17**	−0.17**	1							
RPM	400	49.49	6.76	0.14**	0.01	−0.09	−0.11*	−0.06	−0.06	0.02	1						
Em	400	2.84	0.58	−0.37***	−0.20***	0.17**	0.18**	0.15**	0.11	−0.10*	−0.12*	1					
Ex	400	3.82	0.79	0.37***	0.22***	−0.22***	−0.18**	−0.20***	−0.18**	0.14**	0.03	−0.03	1				
A	400	2.87	0.59	0.05	−0.06	0.03	0.02	0.03	0.01	0.04	0.05	−0.08	0.01	1			
C	400	3.49	0.64	0.28***	0.41***	−0.20***	−0.08	−0.20***	−0.21***	0.25***	0.00	−0.04	0.16**	0.02	1		
O	400	3.77	0.71	0.17**	0.19***	−0.06	−0.07	−0.07	−0.01	0.00	0.16**	−0.09	0.13*	−0.03	0.01	1	
Sex	400	0.46	0.50	0.14**	−0.05	0.01	−0.06	0.05	−0.01	−0.17**	−0.03	0.43***	0.11*	−0.07	−0.01	0.07	1

Note. TEI = Trait Emotional Intelligence Questionnaire -Short Form, CAAS = Career Adapt-Abilities Scale, CDDQ = Career Decision-making Difficulties Questionnaire total score, LR = Lack of Readiness, LI = Lack of Information, II = Inconsistent Information, SPES = Self-Perceived Employability Scale, RPM = Raven's Matrices, EM = Emotionality, Ex = Extraversion, A = Agreeableness, C = Conscientiousness, O = Openness. Sex: 0 = male, 1 = female.

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

Table 2

Fit results of the mediation analyses.

Dependent variables	χ^2	df	CFI	TLI	RMSEA	SRMR	Model comparisons
Career indecision							$\Delta\chi^2(df)$
Partial mediation	15.49	10	0.978	0.968	0.042	0.022	
Full mediation	19.02	11	0.969	0.957	0.049	0.024	3.53(1)
Lack of readiness							
Partial mediation	23.16*	10	0.940	0.910	0.065	0.028	
Full mediation	28.66**	11	0.919	0.890	0.072	0.032	5.49(1)*
Lack of information							
Partial mediation	11.66	10	0.993	0.990	0.023	0.019	
Full mediation	15.19	11	0.983	0.977	0.035	0.021	3.54(1)
Inconsistent information							
Partial mediation	14.55	10	0.979	0.969	0.038	0.022	
Full mediation	14.74	11	0.983	0.977	0.033	0.022	0.20(1)
Employability							
Partial mediation	29.16*	10	0.943	0.913	0.069	0.026	
Full mediation	29.30*	11	0.945	0.924	0.064	0.026	0.14(1)

Note. df = degrees of freedom, CFI = Comparative Fitness Index, TLI = Tucker-Lewis Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean square Residual. The regression paths from sex, intelligence, emotionality, extraversion, and openness were removed from these models because of their non-significant effects on career adaptability.

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

4. Discussion

The aim of the current study was to examine the mediating role of career adaptability on the relationship between: a) TEI and career indecision, and b) TEI and self-perceived employability. We hypothesized a full mediation for both paths. Our hypotheses were supported in all cases except for the career indecision aspect of lack of readiness.

Career adaptability acted as a mediator of the relationship between TEI and career indecision. Indeed, individuals scoring high on TEI obtained higher scores on career adaptability, which in turn had a positive impact on career indecision scores. These results suggest that the perceived capacity to understand and use emotions in different contexts may mobilize individuals' self-regulatory resources, which in turn reduce difficulties in making career decisions. Career adaptability was shown to be a mediator of the relationship between personality dispositions and career exploration and engagement (Li et al., 2015; Nilforooshan & Salimi, 2016). Our study indicates that career adaptability may also regulate the impact of more emotional dispositions, in particular trait emotional intelligence, on career decision-making difficulties. Indeed, when including career adaptability as a mediator, TEI

has no anymore a direct effect on career indecision. This finding highlights the importance of considering the mechanisms through which a predictor may affect an outcome, and not simply testing the direct effect of the predictor.

Concerning the three categories of career decision-making difficulties, career adaptability fully mediated the relationship between TEI and lack of information and inconsistent information, but TEI had only a direct positive effect on lack of readiness to enter the career decision-making process, the indirect effect through career adaptability being non-significant. Overall these results suggest that TEI has an important role in affecting perceived difficulties arising before making career-related decisions. Thus, individuals with high TEI would have fewer difficulties related to a lack of willingness to make a decision, to a general difficulty in making decision, or to dysfunctional beliefs about career decision-making process. Career adaptability seems to regulate the relationship between TEI and career decision-making difficulties that involve a lack of information and difficulties utilizing information due to inconsistency encountered during the decision-making process. TEI had once again no direct effect on both outcomes.

Career adaptability also acted as a full mediator of the relationship

between trait emotional intelligence and self-perceived employability. Indeed, individuals with high trait emotional intelligence through an activation of their career adaptability resources showed a better self-perceived employability, indicating that the perceived capacity to deal with emotions may activate the psychosocial self-regulatory resources, which in turn raise the confidence in finding a future employment. As for previous models, TEI had no direct effect on employability.

The established relationship between conscientiousness and career adaptability was also confirmed by our study. Indeed, when the effect of conscientiousness on career adaptability was not controlled for, all the models showed poor fit. The meta-analysis conducted by Rudolph et al. (2017) showed that career adaptability and conscientiousness are strongly associated, which explains the better model fit once accounting for this link in the analysis.

4.1. Limitations and future directions

Limitations of the current study include the use of a cross-sectional analysis to test the mediation hypotheses. It would be interesting to test them with a longitudinal design to see if the activation of career adaptability and its impact on career-related outcomes occurs across different time-lags. An additional limitation to consider is that this study used a student sample, and the results are not based on real-life career experiences.

Previous research has shown that career adaptability influences job-related outcomes by affecting positive and negative emotional responses in the workplace (Fiori, Bollmann, & Rossier, 2015). The current findings add to our understanding of career adaptability by showing the dispositional affective antecedents that may mobilize the cognitive resources of career adaptability to support more effective career decision-making and more positive perceived employability. Ultimately, career adaptability emerges as a self-regulatory skill that shapes affective reactions (Fiori et al., 2015) and is also shaped by the perceived capacity to manage emotional experience.

Based on the results of the current investigation, fruitful future directions could involve the development of interventions for career orientation that address potential deficits in both affective dispositions (e.g., trait emotional intelligence) and emotional states (e.g., negative affect) and cognitive self-regulatory resources (e.g., career adaptability). Important to note is that the affective and cognitive determinants of career-related outcomes may reciprocally influence each other, thus it would be advisable to intervene on both components at the same time. Because our results show that both conscientiousness and TEI affected career adaptability and career-related outcomes, future research might investigate potential interaction effects of these two personality dispositions.

That trait emotional intelligence exerts positive effects on career indecision and employability is well known in the literature. Our contribution adds evidence for the path through which such effects may occur: individuals who are more confident in their capacity to handle emotional situations, including those generated by the search for an employment, mobilize more cognitive self-regulatory resources. These in turn positively affect individuals' self-perceived employability and lower their career indecision. Ultimately, this study helps provide a more comprehensive picture of the factors affecting career related outcomes.

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Declarations of interest

None.

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