Five-Factor Model of Personality and Organizational Commitment:

The Mediating Role of Positive and Negative Affective States

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Abstract

Using a one-year longitudinal study of four components of organizational commitment (affective, normative, continuance-sacrifices, and continuance-alternatives) on a sample of employees from multiple organizations (N = 220), we examined the relationships of employee Big-Five personality traits to employee commitment components, and the mediating role of positive and negative affective states. Personality was measured at Time 1 while affective states and commitment components were measured at Time 2, while controlling for Time 1 commitment. Extraversion and agreeableness were positively related to affective, normative, and continuance-sacrifices commitment via enhanced positive affect. Agreeableness was also positively linked to affective commitment and negatively associated with continuance-alternatives commitment through reduced negative affect. Finally, neuroticism was negatively linked to affective commitment, and positively related to continuance-alternatives commitment, through increased negative affect. The implications of these findings for our understanding of personality-commitment linkages are discussed.

Keywords: Big Five personality traits, organizational commitment, positive affect, negative affect

Five-Factor Model of Personality and Organizational Commitment:

The Mediating Role of Positive and Negative Affective States

The Big Five personality model (Digman, 1989; McRae & Costa, 1987) has gained widespread acceptance in the scientific community and has contributed to a resurgence of personality research in organizational behavior and I/O psychology. Indeed, this model has been used to study relationships between personality and variables of interest to organizations such as leadership (Bono & Judge, 2004), job satisfaction (e.g., Judge, Heller & Mount, 2002), job performance (e.g., Barrick, Mount, & Judge, 2001) and turnover (e.g., Zimmerman, 2008). This research stream has generally supported the notion that "personality is an important determinant of individual behaviour in the workplace" (Penney, David, & Witt, 2011, p. 297).

Our focus in this study is on the linkages between the Big Five traits and organizational commitment. Based on Affective Events Theory (AET; Weiss & Cropanzano, 1996), we posit that (a) dispositions influence the extent to which individuals experience positive and negative affective states by acting upon the likelihood of encountering certain types of events at work (e.g., Magnus, Diener, Fujita, & Pavot, 1993) and by initiating self-regulatory processes that guide emotional and behavioral responses (Gramzow, Sedikides, Panter, Sathy, Harris, & Insko, 2004), and (b) through affective states, dispositions influence the types of commitment which employees experience. That is, depending on their relative standing on Big Five traits, people will encounter events that generate certain emotional content which will be processed in order to initiate certain attitudes and behavior. Our contention that Big Five traits contribute to affective states is consistent with research suggesting that Big Five traits influence how people self-regulate their emotional experience (e.g., Kokkonen & Pulkkinen, 2001a, 2001b; Tobin, Graziano, Vanman, & Tassinary, 2000) and select themselves into situations that reflect their emotional states (Emmons, Diener, & Larsen, 1985; Judge, Heller et al., 2002). We contend that Big Five traits indirectly influence one's commitment by determining which affective states are experienced.

Although research has widely investigated the situational antecedents of commitment (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Morrow, 2011), much less attention has been given to its dispositional antecedents. Moreover, previous research on the relationships between Big Five traits and commitment has been extremely limited (for an exception, see Erdheim, Wang & Zickar, 2006), and mostly cross-sectional. The present study intends to contribute to commitment theory by shedding light on the mechanisms through which personality may predispose employees to experience specific types of commitment. Indeed, scholars have called for increased efforts to understand the intervening processes in these relationships (e.g., Penney et al., 2011). As explained below, this study relies on a multidimensional view of commitment. To overcome the limitations of prior research, we opted for a longitudinal design in which the influence of Big Five traits on commitment through affect was examined while accounting for initial commitment levels.

The Three-Component Model of Organizational Commitment

Meyer and colleagues (Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001) conceptualized commitment as a force that binds individuals to courses of action of relevance to organizations. With the three-component model, they proposed that different mindsets underlie commitment. Affective commitment (AC) refers to an emotional attachment, identification, and involvement in the organization, normative commitment (NC) represents loyalty towards the organization out of a sense of obligation to it, and continuance commitment (CC) is based on a perceived necessity to stay. Further work on the dimensionality of CC suggested that it comprises two separate components: the perceived sacrifices or *cost* of leaving (CC-sacrifices) and the perceived *lack of alternatives* (CC-alternatives) which may face employees in case of leaving (e.g., McGee & Ford, 1987). While CC-sacrifices is based on ties with the organization, CC-alternatives reflects commitment "by default" (Becker, 1960) as it involves a sense of being trapped within the organization. AC, NC, CC-sacrifices and CC-alternatives thus evoke distinct motives used by employees to make sense of their perceived bond with the organization.

Affective States

One important framework for understanding the role of emotions at work is AET (Weiss & Cropanzano, 1996). This theory posits that individuals are predisposed to experience certain events at work, thereby influencing the moods and emotions they experience. AET thus advances that dispositions act upon the *objective* stimuli to which an individual is subjected. One reason this may occur is because an individual's personality influences the behavior of others towards him or her, and because dispositions may influence the situations individuals seek out (e.g., Emmons et al., 1985; Magnus et al., 1993). Furthermore, dispositions may determine the experience of affective states by influencing the self-regulatory processes (such as emotion regulation strategies) that generate patterns of emotional and behavioral responses (Gramzow et al., 2004; Kokkonen & Pulkkinen, 2001a, 2001b). AET also proposes that, via moods and emotions, dispositions may influence individuals' responses to their jobs, such as job attitudes. Indeed, work attitudes such as organizational commitment are largely influenced by the way individuals respond affectively to their work environment (Cropanzano, James, & Konovsky, 1993).

Big Five Traits, Affective States, and Commitment

In the present study, we propose that three Big Five traits, namely extraversion, neuroticism, and agreeableness, act upon commitment components through the affective states they engender. Extraversion, which involves a propensity to experience positive emotions, and neuroticism, which reflects a predisposition to experience negative life events and emotions, are naturally tied to how people regulate their emotions (Gramzow et al., 2004; Kokkonen & Pulkkinen, 2001a, 2001b). Emotional regulation refers to the processes through which individuals monitor, evaluate and modify "the occurrence, intensity and duration of emotional reactions" (Kokkonen & Pulkkinen, 2001a, p. 83). Recent research has revealed that agreeableness, i.e., the tendency to be trusting, compliant, and caring (Judge, Bono, Ilies, & Gerhardt, 2002), also involves the regulation of emotional experience (Haas, Omura, Constable, & Canli, 2007). As shown by Tobin et al. (2000,

p.657), agreeableness "may be related to emotional processes that have consequences for relationships". Below, we develop our hypotheses.

Extraversion

Extraversion is characterized by sociability, ambition, and positive emotionality (Barrick et al., 2001; Judge, Bono et al., 2002). Extroverts have been shown to regulate emotions through seeking socioemotional support from others and displaying reduced emotional ambivalence (Kokkonen & Pulkkinen, 2001b), and use adaptive emotional regulation strategies (Carver & Connor-Smith, 2010). In the work context, partly through these mechanisms, extroverts are likely to be trusted by others, and because they are sociable, they are likely to experience pleasant interactions with others, which should tinge the workplace experience positively. It has also been suggested that as they achieve higher social integration, extroverts experience more embeddedness in the organization (Zimmerman, 2008). Through this process, extroverts are likely to enact their environment and, following AET (Weiss & Cropanzano, 1996), act upon the stimuli to which they are subjected. For example, they are likely to enjoy high-quality interactions with supervisors. Moreover, as extroverts are motivated to achieve status and rewards (Zimmerman, 2008; Zimmerman, Boswell, Shipp, Dunford, & Boudreau, in press), they invest resources that provide opportunities for positive feedback and rewards (Penney et al., 2011). Rewards enhance AC via social exchange processes (Cohen & Gattiker, 1994). Indeed, employees feel compelled to reciprocate for the resources offered by the organization, and AC is a form of reciprocation (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). Rewards also create a sense of obligation (NC), and represent an advantage people want to preserve (CC-sacrifices) (Meyer & Allen, 1997). Extraversion thus likely relates to AC, NC, and CC-sacrifices partly because its positive emotionality component facilitates the provision of rewards. In sum, we propose that extroverts enact a positive and rewarding environment because they use adaptive emotional strategies, which should foster positive affect and, via positive affect, AC, NC and CC-sacrifices.

affect and (b) reduced negative affect.

Hypothesis 1: Extraversion is indirectly and positively related to (a) AC, (b) NC, and (c) CC-sacrifices through positive affect.

Agreeableness

Agreeableness "deals with motives for maintaining positive relations with others" (Tobin et al., 2000, p. 656). As a result, it involves emotional processes that are relevant to an interpersonal context and have implications for relationships with others. Two mechanisms may come into play in how agreeable people cope with emotions in interpersonal situations: they experience and express empathetic feelings at others' life events, and they may control emotions that have relationship implications (Tobin et al., 2000). In the work context, as agreeable people are able to regulate emotions to maintain harmonious relationships, they may enact a friendlier environment, foster team cohesiveness, and enjoy consideration from others, resulting in their being accepted as important and trustworthy organizational members. Consequently, as argued by Zimmerman (2008), agreeableness may engender job embeddedness (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). In line with AET, this likely fosters a positive affective state which may enhance identification to the organization (Ellemers, de Gilder, & Haslam, 2004), hence AC. Indeed, the experience of positive affect facilitates social acceptance at work, thus enhancing AC. In parallel, agreeable individuals' regulation of negative emotions likely reduces feelings of negative affect, thus helping to maintain social cohesion with others. We thus propose the following hypotheses.

This expected mediated relationship may partly extend to NC. In fact, NC is rooted in normative beliefs of reciprocity (Gouldner, 1960; Wiener, 1982). Higher levels of NC suggest the individual feels indebted toward the organization because he/she has earned valuable benefits or received signs of consideration. Thus, NC represents the subjective experience of the norm of reciprocity. As agreeable people are cooperative, inclined to show empathy and have a prosocial

Hypothesis 2: Agreeableness is indirectly and positively related to AC through (a) positive

motivation (Graziano, Habashi, Sheese, & Tobin, 2007), they plausibly experience more positive emotions and less negative emotions in their work relationships. In turn, this may lead them to experience a feeling of duty and obligation (NC) towards the organization (Zimmerman, 2008) which provides the opportunity for such rewarding relationships. The above reasoning leads us to expect agreeableness to be related to employee NC through more positive, and less negative affect.

Hypothesis 3: Agreeableness is indirectly and positively related to NC through (a) positive affect and (b) reduced negative affect.

Agreeableness may also indirectly affect CC-sacrifices through affective states. The "sacrifice" component of CC refers to a variety of ties that individuals develop with their organization: some instrumental, such as pay level, bonuses, and benefits, and others psychological, such as freedom to pursue one's goals on the job, and respect from others at work (Mitchell et al., 2001). All these issues represent sacrifices the individual would incur in case of leaving. Following our logic, agreeableness may contribute to CC-sacrifices through enhanced positive affect and reduced negative affect. As discussed above and consistent with AET, agreeableness likely engenders the experience of positive emotions and reduced negative emotions in interpersonal context. In turn, positive emotions likely increase the psychological cost of leaving, as agreeable employees may be reluctant to sever emotionally rewarding relationships with co-workers (Zimmernan, 2008). In parallel, reduced negative emotions may be associated with less anxious and negative appraisal of the cost of leaving, as individuals who experience less negative emotions at work may perceive the cost of leaving as being lower (Vandenberghe, Panaccio, & Ben Ayed, 2011). Thus, the following hypotheses are proposed.

Hypothesis 4: Agreeableness is indirectly and positively related to CC-sacrifices through (a) positive affect and (b) reduced negative affect.

Finally, agreeableness may come into play in the process through which people develop commitment out of a lack of employment alternatives (CC-alternatives). As agreeableness is expected to facilitate social acceptance within the organization partly through reduced negative affect, it should be indirectly associated with lower CC-alternatives. Indeed, by reducing the experience of negative emotions, agreeableness may alleviate the fearful appraisal of not finding alternative employment and the risk of not finding alternative jobs if one were to leave (i.e., CC-alternatives). Thus, agreeableness may reduce CC-alternatives through reduced negative affect.

Hypothesis 5: Agreeableness is indirectly and negatively related to CC-alternatives through reduced negative affect.

Neuroticism

Neuroticism is a tendency to exhibit poor emotional adjustment and experience negative affect (Judge, Bono et al., 2002). Neurotic individuals partly select themselves into situations that generate negative affect (Judge, Heller et al., 2002). Accordingly, neuroticism is associated with a variety of maladaptive coping mechanisms including disengagement, wishful thinking and withdrawal (Connor-Smith & Flachsbart, 2007), and low job search self-efficacy (Zimmerman et al., in press). Because neurotic individuals tend to dwell on the negative side of things (Bono & Judge, 2004), can view neutral events as problematic (Duffy, Shaw, Scott, & Tepper, 2006), and are prone to mood swings and anger (Watson, Clark & Harkness, 1994), they tend to experience lower well-being, more stress (Ozer & Benet-Martinez, 2006), more burnout (Zimmerman et al., in press), and poor relationship satisfaction with partners (White, Hendrick, & Hendrick, 2004). In the work context, these outcomes may lead neurotics to experience few constructive work experiences that would create a positive commitment to the organization, hence reducing AC, NC and CC-sacrifices. Rather, commitment "by default" (Becker, 1960) may develop, that is, commitment based on few perceived alternatives. Thus, we posit that, because neurotic individuals may be more likely to experience negative events at work, neuroticism will engender negative affect which, in turn, will lead to lower AC, NC and CC-sacrifices, and higher CC-alternatives.

Hypothesis 6: Neuroticism is indirectly and negatively related to (a) AC, (b) NC, and (c) CC-sacrifices through negative affect.

Hypothesis 7: Neuroticism is indirectly and positively related to CC-alternatives through negative affect.

Method

Sample and Procedure

Fifty-seven prospective participants from one of the authors' network were contacted for participation in a study of work attitudes. Invitations were sent as emails containing a link to an online questionnaire. The invitation described the purpose of the study, explained that responses would be kept confidential and specified that participants would be asked to complete a second survey one year later. These 57 prospective participants were also instructed to forward the invitation to participate to colleagues from their own network. In addition, 23 self-employed individuals (thus not eligible to participate in the study, as they did not have an employment bond with an organization), also from the author's network, were simply asked to forward the same introductory message to employees and managers in their own network. In order to allow for calculation of the response rate, the author asked to be informed of the number of people to whom contacts had forwarded the message.

Out of 80 people contacted directly by the author, 66 forwarded the survey to their own network. In total, 1060 individuals were contacted, 403 of whom (38%) provided valuable responses to the Time 1 questionnaire. One year later, respondents were contacted via email for completing the second survey. Among them, 260 (65%) provided usable responses. We excluded 40 respondents who changed organizations between Time 1 and Time 2, yielding a final sample of 220 respondents. At Time 1, we measured Big-Five traits, organizational commitment components (AC, NC, CC-sacrifices, and CC-alternatives), and demographics, while at Time 2 we assessed state positive and negative affect, and again the four commitment components. Respondents had

the option of answering the Time 1 questionnaire either in French or in English, and were invited to complete the Time 2 questionnaire in the language chosen at Time 1. In the final sample (N = 220), average age was 35.10 years (SD = 8.80), average organizational tenure was 8.22 years (SD = 7.16), 51.9% were female, and 81.8% answered the French versions of the surveys. A large variety of industries was represented in the sample, including health services (12.3%), information technology (10.5%), engineering and architecture (8.6%), human resource management (8.2%), and education (7.7%). To determine whether subject attrition led to non-random sampling across time, we tested whether the probability of remaining in the sample at Time 2 was predicted by Time 1 variables (see Goodman & Blum, 1996). The criterion was a dummy-coded variable classifying respondents as stayers vs. leavers, and the predictors were the Time 1 substantive variables (Big-Five traits, and commitment variables) and demographics (age, sex, tenure, and language). The result for the overall equation was non significant (χ^2 [13] = 15.69, ns) and none of the predictors were significant (results are available upon request). This suggests data attrition was essentially random.

Measures

A 5-point Likert-type scale (1=strongly disagree; 5=strongly agree) was used for all items.

Big Five personality traits. We used the Big Five Inventory (BFI) developed by John,

Donahue and Kentle (1991) to measure the Big Five traits. The BFI comprises items measuring extraversion (8 items; e.g., "is full of energy"), agreeableness (9 items; e.g., "is helpful and unselfish with others"), conscientiousness (9 items; e.g., "is a reliable worker"), neuroticism (8 items; e.g., "worries a lot"), and openness (10 items; e.g. "is ingenious, a deep thinker"). The internal consistency coefficients for BFI scales have been found to be reasonably good in various U.S. and Canadian samples, ranging from .75 to .90 (Benet-Martinez & John, 1998; John, Naumann, & Soto, 2008; John & Srivastava, 1999). Moreover, the BFI appears weakly affected by social desirability and self-esteem biases (Erdle & Rushton, 2011). In the present study, alpha

coefficients were good for extraversion (α = .87), conscientiousness (α = .77), neuroticism (α = .86), and openness (α = .79). For agreeableness, reliability was slightly below the norm (α = .67), after deleting one item that appeared to reduce the scale's internal consistency.

Organizational commitment. We used Bentein, Vandenberg, Vandenberghe, & Stinglhamber's (2005) adapted version of Meyer, Allen, and Smith's (1993) scales to measure commitment. These scales include AC (6 items; e.g., "I am proud to belong to this organization"; $\alpha s = .89$ and .88, at Time 1 and Time 2), NC (6 items; e.g., "I think I would be guilty if I left my current organization now"; $\alpha s = .90$ and .88, at Time 1 and Time 2), CC-sacrifices (3 items; e.g., "I would not leave this organization because of what I would stand to lose"; $\alpha s = .78$ and .77, at Time 1 and Time 2), and CC-alternatives (3 items; e.g., "I feel that I have too few options to consider leaving this organization"; $\alpha s = .76$ and .77, at Time 1 and Time 2).

Positive and negative affect. We used the ten positive and ten negative items from Watson, Clark, and Tellegen's (1988) Positive and Negative Affect Schedule to assess state affect. Sample items are "excited" (positive affect; $\alpha = .88$) and "upset" (negative affect; $\alpha = .86$).

Control variables. We initially controlled for age, sex, tenure, and language in our analyses as prior research had suggested that some of these variables may correlate with commitment components (Meyer et al., 2002). However, as the introduction of these variables did not change meaningfully our regression results (as reported in Tables 3 and 4), we dropped these controls from the analyses reported hereafter (the results of these analyses are available upon request).

Results

Confirmatory Factor Analyses

We first examined the distinctiveness of our study variables using confirmatory factor analysis (CFA) via LISREL 8.72 (Jöreskog, Sörbom, Du Toit, & Du Toit, 2001) with a covariance matrix as input and the maximum likelihood method of estimation. As threats to discriminant validity may particularly appear when variables are measured at the same occasion, we examined the

structure of Time 1 and Time 2 data separately. To reduce the complexity of our measurement models, we combined items to create three indicators per construct for those measured by more than three items (Landis, Beal, & Tesluk, 2000). We then tested and compared our theoretical models against more parsimonious solutions using χ^2 difference tests (Bentler & Bonett, 1980). As can be seen from Table 1, the hypothesized nine-factor model comprising Big Five traits and the four commitment dimensions at Time 1 yielded a good fit to the data: χ^2 (288) = 599.75, p < .001, CFI = .91, IFI = .91, RMR = .061, RMSEA = .067, and proved superior (p < .001) to any more parsimonious representations of the data. Similarly, the hypothesized six-factor model comprising positive and negative affect and the four commitment components at Time 2 fit the data well: χ^2 (120) = 285.18, p < .001, CFI = .95, IFI = .95, RMR = .068, RMSEA = .076, and proved superior (p < .001) to any simpler representation of the data.

Descriptive Statistics and Intercorrelations

Descriptive statistics, correlations, and alpha coefficients are presented in Table 2. With the exception of agreeableness, all variables displayed good internal consistency (> .70). Of interest, extraversion was positively related to positive affect (r = .14, p < .05), while agreeableness was negatively, and neuroticism positively, related to negative affect (r = -.23, p < .01 and r = .25, p < .01, respectively). Further, positive affect was positively associated with Time 2 AC, NC, and CC-sacrifices (r = .72, .38, and .23, respectively, all p < .01) and negatively related to Time 2 CC-alternatives (r = -.22, p < .01). In contrast, negative affect was negatively associated with Time 2 AC (r = -.29, p < .01) and positively related to Time 2 CC-alternatives (r = .27, p < .01).

Regression Analyses

We first used multiple linear regression to assess the relationships between Big Five traits (at Time 1) and affective states at Time 2. For each dependent variable (positive and negative affect), we examined all Big Five traits as predictors. Results are presented in Table 3. The overall equation explained significant variance in both positive ($R^2 = .08$, p < .01) and negative ($R^2 = .10$,

p < .01) affect. Extraversion and agreeableness were positively related to positive affect ($\beta = .16$, p < .05, and $\beta = .15$, p < .05, respectively) while agreeableness was negatively, and neuroticism positively, related to negative affect ($\beta = -.18$, p < .05, and $\beta = .22$, p < .01, respectively).

In a second set of multiple regression analyses, we examined the contributions of Big Five traits and positive and negative affect to Time 2 commitment components. For each Time 2 commitment component used as dependent variable, we controlled for its level at Time 1 (Step 1), then entered Big Five traits (Step 2) and finally positive and negative affect (Step 3). Results are reported in Table 4. Variables explained significant variance in Time 2 AC ($R^2 = .57$, p < .001), NC ($R^2 = .42$, p < .001), CC-sacrifices ($R^2 = .35$, p < .001), and CC-alternatives ($R^2 = .42$, p < .001). In the overall equation predicting Time 2 AC (Model 3), Time 1 AC ($\beta = .52$, p < .001), conscientiousness ($\beta = -.11$, p < .01), positive affect ($\beta = .42$, p < .001), and negative affect ($\beta = .12$, p < .01) were significant. For Time 2 NC (Model 3), Time 1 NC ($\beta = .59$, p < .001), extraversion ($\beta = .11$, p < .05), and positive affect ($\beta = .21$, p < .001) were significant predictors. In Time 2 CC-sacrifices' Model 3, Time 1 CC-sacrifices ($\beta = .56$, p < .001), agreeableness ($\beta = .14$, p < .05), neuroticism ($\beta = .20$, p < .001), and positive affect ($\beta = .14$, p < .05) were significant. Finally, for Time 2 CC-alternatives (Model 3), Time 1 CC-alternatives ($\beta = .62$, p < .001) and negative affect ($\beta = .13$, p < .05) were the sole significant predictors.

Hypotheses Tests

As our hypotheses involved mediated relationships, we estimated the significance of the indirect effects of the independent variables on dependent variables through the mediators of interest. To do so, we used a bootstrap approach, which overcomes shortcomings of Baron and Kenny's (1986) procedure (cf. MacKinnon, Lockwood, Hoffman.West, and Sheets, 2002; Preacher & Hayes, 2004; Zhao, Lynch, & Chen, 2010) and of the Sobel (1982) test (cf. Shrout & Bolger, 2002; Zhao et al., 2010). We bootstrapped 5,000 samples to obtain 95% bias-corrected

confidence intervals (CI) (MacKinnon, Lockwood, & Williams, 2004). If the CI did not include "zero", the indirect effect was reputed to significantly differ from zero. Results are presented in Table 5.

Hypothesis 1 stated that extraversion would exert a positive effect on Time 2 AC, NC and CC-sacrifices through positive affect. As can be seen in Table 5, we found that extraversion's indirect effect through positive affect was significant for Time 2 AC (.190, 95% CI = .080, .304), NC (.093, CI = .038, .163), and CC-sacrifices (.066, 95% CI = .020, .140), lending support for Hypothesis 1. Hypothesis 2a predicted that agreeableness would contribute to Time 2 AC via positive affect. As shown in Table 5, the indirect effect of agreeableness on Time 2 AC via positive affect was significant (.283, 95% CI = .091, .475), supporting Hypothesis 2a. In line with Hypothesis 2b, agreeableness also exerted a positive effect on Time 2 AC via reduced negative affect (.117, 95% CI = .045, .232).

Hypothesis 3a predicted that agreeableness would exert an indirect effect on Time 2 NC via positive affect: as shown in Table 5, this indirect effect was significant (.146, 95% CI = .050, .273), supporting Hypothesis 3a. In contrast, Hypothesis 3b, which predicted agreeableness to be indirectly related to Time 2 NC through negative affect, was rejected because negative affect was unrelated to Time 2 NC (β = -.04, ns; see Table 4). Hypothesis 4a stated that agreeableness would be positively related to Time 2 CC-sacrifices via positive affect. This indirect effect was significant (.089, 95% CI = .025, .202) (cf. Table 5), supporting Hypothesis 4a. In contrast, Hypothesis 4b which predicted that agreeableness would positively relate to Time 2 CC-sacrifices through reduced negative affect was rejected because negative affect was unrelated to CC-sacrifices (β = -.04, ns; see Table 4). Finally, as specified by Hypothesis 5, agreeableness negatively contributed to CC-alternatives through reduced negative affect (-.137, 95% CI = -.255, -.055) (cf. Table 5).

Hypothesis 6 predicted that neuroticism would be indirectly and negatively related to Time 2

AC, NC and CC-sacrifices through negative affect. The indirect effect on Time 2 AC was significant (-.097, 95% CI = -.182, -.041) (cf. Table 5), but the other indirect effects did not hold as negative affect was unrelated to Time 2 NC and CC-sacrifices (β s = -.04 and -.04, both ns; see Table 4). Thus, Hypothesis 6 was partly supported. Finally, as predicted by Hypothesis 7, neuroticism was indirectly and positively related to CC-alternatives through negative affect (.083, 95% CI = .034, .158) (cf. Table 5).

Discussion

This study breaks new ground by shedding light on a largely overlooked issue in the commitment literature, i.e., the nature of the relationship of personality, herein exemplified by Big Five traits, with organizational commitment components. Specifically, extraversion, agreeableness and neuroticism predicted change in organizational commitments partly through the mediating influence of positive and negative affective states. These findings are consistent with theoretical views of personality (e.g., Emmons et al., 1985; Weiss & Cropanzano, 1996) stressing that moods and emotions engendered by personality traits explain why individuals encounter certain stimuli and enact specific environments. For example, the positive emotionality of extroverts helps them build rewarding environments (George, Helson, & John, 2011), while agreeables' tendency to experience positive emotions and control negative emotions in interpersonal context (Graziano et al., 2007; Tobin et al., 2000) help them achieve better social acceptance, and neurotics' negative emotionality causes them to experience negative events and poor quality relationships (Jackson, Dimmock, Gucciardi, & Grove, 2010; Judge, Heller et al., 2002).

Theoretical Implications and Future Directions

As results demonstrate, extraversion fostered different bases of commitment to the organization via its positive association with positive affect. We suggested this may be due to extroverts being able to gain rewarding job conditions in their workplaces (George et al., 2011). As extroverts get ahead socially and are enjoyable, assertive, and dominant, they are plausibly

easily trusted and likely to encourage supervisors to reward them through more challenging assignments and pay raises. There is indeed evidence that extroverts achieve higher job status in the longer term (George et al., 2011) and seek growth opportunities and perceive more job challenge (Zimmerman et al., in press). However, it is unclear which facet of extraversion, affiliation or agency (Depue & Collins, 1999), may be involved in this process. Future research is needed to clarify these issues. More generally, it would be worth clarifying what extroverts gain from their environment through their emotional coping strategies. Based on commitment theory (Meyer & Allen, 1997), it would make sense that the attainment of valued rewards is the key mediating mechanism. Indeed, valued rewards may serve as a currency for social exchange (i.e., AC), felt obligation toward the organization (i.e., NC), and a benefit one does not want to forgo in case of leaving the organization (CC-sacrifices). Finally, it is worth noting that extraversion displayed a direct and positive effect on NC. This may be explained by the fact that extroverts seek out more social interactions at work (Erdheim et al., 2006), which may result in opportunities to establish mutual arrangements with others at work, increasing the feeling that one owes a lot to the organization.

Agreeableness was associated with the largest number of indirect effects on commitment components, owing to its link to both increased positive affect and reduced negative affect. As agreeable people express empathetic concerns and prosocial motivation in the context of interpersonal relationships (Graziano, Jensen-Campbell, & Hair, 1996; Graziano et al. 2007), they likely build stronger exchange relationships with co-workers and the organization's agents, such as supervisors. Again, these ties may serve as currencies that foster AC, NC, and CC-sacrifices. To further understand these connections, it would be worth investigating which specific coping mechanisms are used by agreeable people in trying to adjust to their work context (see Connor-Smith & Flachsbart, 2007) and determine which among enhanced positive emotions vs. refrained negative emotions are more effective for gaining social acceptance at work. Moreover, our data do

not allow identifying whether agreeableness results in enhanced group cohesiveness which in turn would foster AC, NC and CC-sacrifices. This is a plausible intervening mechanism however because group cohesiveness is generally stronger when interpersonal attraction is high and is a known antecedent to different bases of employee commitment (e.g., Bishop & Scott, 2000). Agreeableness also exerted a significant reducing effect on CC-alternatives through lowering the occurrence of negative emotions. This finding is interesting as it shows that agreeable people, through their capacity to exert implicit control over the expression of negative affect (Haas et al., 2007), maintain better interpersonal relationships and reduce stressful situations, therefore paving the path toward more optimistic assessment of their value to others. This self-perception may generalize to one's feeling as a competent employee, and hence to one's perception of opportunities in the job market. Of course, future research should investigate more precisely whether such self-views are modified as explained above through the indirect influence of agreeableness. On another matter, our findings also indicate that agreeableness has a direct relationship to CC-sacrifices, suggesting that the social ties created by agreeable employees may increase the cost associated with the employment relationship (Zimmerman, 2008).

Neuroticism was associated with a decrease of AC and CC-alternatives over time via negative affect. This finding is consistent with research revealing neurotics to be liable to stress and burnout (Zimmerman et al., in press), and low levels of well-being (Ozer & Benet-Martinez, 2006) and job satisfaction (Judge, Heller et al., 2002). Neurotics tend to find themselves in stressful and unsatisfying situations, partly because they select themselves into those situations (Judge, Heller et al., 2002). One plausible explanation for this process is that the recurrent negative emotions inherent to neuroticism constitute the phenomenological experience of an avoidance strategy (Zimmerman et al., in press), which has a neurobiological foundation in the behavioral inhibition system (Watson, Wiese, Vaidya, & Tellegen, 1999). This system sensitizes the individual to avoid aversive situations, i.e., those situations that create potential harm to oneself. Thus, neurotics are

less socially integrated in the organization, tend to be in conflict with co-workers and supervisors, hence creating environments that are less conducive to developmental experiences. Therefore, they will learn less and have difficulty develop their competencies. This would explain why neuroticism relates to higher CC-alternatives via negative affect. Indeed, the lack of perceived competencies is linked to CC-alternatives. Further, as neurotics get little exposure to challenging work assignments, they are likely to miss one of the key ingredients that foster the development of AC (Meyer et al., 2002). All in all, future research should investigate what role anxiety plays in the detrimental effects of neuroticism on commitment. As an aside, it is interesting to note that neuroticism had a direct and positive effect on CC-sacrifices, suggesting that the appraisal of the cost associated with being employed in the organization is perceived to be higher among individuals high in neuroticism.

Also noteworthy, conscientiousness displayed a direct and negative relationship with AC. This indicates that conscientiousness may influence commitment, but the absence of a significant relationship between this trait and either positive or negative affect suggests mechanisms other than affective states are involved. As this study's focus was on emotional processes as mediators of personality-commitment relationships and as conscientiousness is thought to drive cognitive (rather than emotional) processes, we did not propose hypotheses pertaining to this trait, but future research on this issue is warranted.

Overall, this study's results offer an interesting contribution to the commitment and personality literatures, as the dispositional antecedents of commitment have received relatively little attention from scholars. Indeed, with a few notable exceptions (e.g., Cohen & Liu, 2011; Erdheim et al., 2006; Gelade, Dobson, & Gilbert, 2006), studies examining the antecedents of different commitment forms have largely focused on situational characteristics, neglecting to take into account individual differences. Erdheim and colleagues (2006) recently drew attention to the importance of exploring commitment's dispositional antecedents, as their study of the

relationships between Big Five traits and commitment forms (using a cross-sectional design) revealed significant relationships. However, these scholars did not explore the underlying mechanisms of these linkages. By proposing and testing mediating processes anchored in a solid theoretical framework, we believe this study further contributes to commitment theory, and offers interesting avenues for future research on the role of personality and affective states in fostering different commitment forms.

In addition to its contribution to the personality, commitment, and affect literatures, this study may have interesting implications for turnover research. Indeed, intended and actual turnover is considered to be commitment's focal outcome (Meyer & Herscovitch, 2001) and research has consistently demonstrated relationships between commitment forms and this important outcome (e.g., Cooper-Hakim & Viswesvaran, 2005; Meyer et al., 2002). As research suggests, Big Five personality traits influence individuals' turnover decisions (e.g., Zimmerman, 2008; Zimmerman, Boswell, Shipp, Dunford, & Boudreau, in press); integrating affective states and commitment as mediating processes as suggested in the current study (in addition to other mediators) may offer a more comprehensive picture of the antecedents of turnover behavior.

Practical Implications

In terms of practical implications, this study suggests organizations should consider employees' levels of extraversion, agreeableness, and neuroticism, to understand how organizational commitment develops over time. Management practices should try to account for these individual differences. For example, as extroverts are naturally inclined to seek rewarding job assignments and as they get ahead socially, are assertive and dominant, they may be targeted as leaders on work projects that need people with those proactivity and leadership skills. They may indeed be particularly effective as formal leaders that are responsible for making things happen.

Research has indeed found extraversion to be the strongest correlate of transformational leadership among the Big Five traits (Bono & Judge, 2004). Similarly, managers may take advantage of

building on agreeable employees' capacity to become socially accepted in teams. These employees, due to their positive emotionality in interpersonal situations, may encourage team cohesiveness and effectiveness. Managers may thus reward these employees by allowing them to work in teams where task interdependence is important. For example, agreeable people would fit perfectly the context of health care teams where empathetic concerns for others (co-workers and clients) and prosocial motivation are particularly required. Finally, as neurotic individuals are anxious and insecure (Watson et al., 1994), they would benefit from being reassured by managers through appropriate coaching. In particular, managers should be attentive to help neurotic employees tone down their negative view of the world. They can do this by offering trust and support, helping them develop new competencies, and building their self-esteem through positive reinforcement. These efforts may help foster positive commitment forms (AC, NC, and CC-sacrifices), and reduce commitment "by default" (CC-alternatives).

Limitations

There are limitations to this study. Although time-lagged data were used and although we controlled for initial levels of commitment, mediators were only measured at Time 2. However, as we controlled for prior levels of commitment, our findings remain robust and given the time interval, less subject to common method variance than most prior research in this field. Future studies should look more closely at how emotional regulation develops from Big Five traits. There have been attempts at capturing the emotional strategies (e.g., repair, engagement, disengagement, etc.) used as a function of people's standing on Big Five traits (e.g., Connor-Smith & Flachsbart, 2007; Gramzow et al., 2004). However, this work needs to be extended to the work context and more longitudinal, prospective designs that track respondents' emotional regulation strategies over time are needed. Lastly, in the course of our reasoning, we alluded to presumptive mechanisms thought to intervene in how personality traits ultimately lead to organizational commitment, but these intermediate outcomes were not measured. Future research is needed on this issue.

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