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How happiness mediates the organizational virtuousness and affective commitment relationship

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ABSTRACT

Recent moral and financial collapse of high profile organizations around the world led the business community, the popular and business press, and researchers to rediscover the worthiness of organizations' virtues. Aiming to contribute to this momentum, this empirical study investigates how perceptions of organizational virtuousness (OV) predict affective well-being (AWB) and affective commitment (AC). Two hundred five individuals participate. The findings show that perceptions of OV predict AC both directly and through the mediating role of AWB. The study suggests that fostering organizational virtuousness (e.g., through honesty, interpersonal respect, and compassion; combining high standards of performance with a culture of forgiveness and learning from mistakes) improves employees' AWB and promotes a more committed workforce. Considering these findings and mirroring the growing contributions of the positive psychology, positive organizational behavior, and positive organizational scholarship movements, the study suggests that a "positive-people-management" perspective should be considered, both by practitioners and scholars.

1. Introduction

Virtuousness refers to the pursuit of the highest aspirations in the human condition (Bright et al., 2006). Organizational virtuousness (OV) refers to organizational contexts where the "good" habits, desires, and actions (e.g., humanity, integrity, forgiveness, and trust) are practiced, supported, nourished, disseminated, and perpetuated, both at the individual and collective levels (Cameron et al., 2004). The topic is almost neglected in organizational literature and out of the focus of practitioner's attention. However, "stunned" by the moral and financial turmoil emerging in recent years around the world, business community and popular and business press appear to assume that cultivating virtues, both at the individual and organizational levels, may improve individual betterment and organizational efficiency and performance (Cameron, 2010; George, 2003; Wright and Goodstein, 2007). A growing number of scholars stress that virtue needs to be added to the business and management research agenda (e.g., Gavin and Mason, 2004; Lilius et al., 2008; Moore and Beadle, 2006; Park and Peterson, 2003; Wright and Goodstein, 2007). Business Ethics Quarterly makes a call for papers on a special issue about the topic ("Reviving tradition: Virtue and common good in business and management").

Some authors investigate the topic empirically (e.g., Bright et al., 2006; Cameron et al., 2004; Chun, 2005; Rego et al., 2010). Cameron et al.'s (2004) development and operationalization of the organizational virtuousness (OV) construct shows promising findings regarding the relationship between OV and performance. These authors propose a five-factor model: (1) Organizational optimism means that a sense of profound purpose guides actions and that organizational members expect to succeed in doing well and doing good, even when facing major challenges; (2) Organizational forgiveness means that (honest) mistakes are received with mercy and considered as opportunities for learning, in a context of high standards of performance; (3) Organizational trust means that courtesy, consideration, and respect govern the organization and that people rely on others, including leaders; (4) Organizational compassion means that people care about each other, and that acts of sympathy and concern are common; (5) Organizational integrity means that honesty, trustworthiness, and honor pervade the organization.

Cameron et al. (2004) also find statistically significant relationships between perceived OV and organizational performance. They consider OV both holistically and distinguish the five sub-factors. Rego et al. (2010) also show that: (a) the second-order factor model (the five factors loading onto an overall OV factor) fits the data adequately; (b) in

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the usefulness analysis, the core OV construct increases the R^2 value of AWB and organizational citizenship behavior above and beyond its respective five individual components. Therefore, the commonalities among the five OV components justify considering OV as a core construct, instead of considering their components separately.

Cameron et al. (Cameron, 2003; Cameron et al., 2004) state that organizational manifestations of virtuousness and their consequences, both for individuals and organizations, remain under-developed theoretically. According to Cameron (2003, p. 49), "[t]his is unfortunate, because virtuousness is intimately tied to what is good to and for human beings, so its omission from scientific investigation leaves a void in understanding the full range of consequential organizational phenomena". Wright and Goodstein (2007) stress that other researchers should employ Cameron et al.'s measure in other contexts and in relation to other outcomes (e.g., organizational commitment), including those that are more indicative of flourishing (e.g., the expression of positive emotions).

This research seeks to "nourish the momentum". More specifically (hypothesized model in Fig. 1), the study focuses on how perceptions of OV predict affective commitment (AC), both directly and through the mediating role of affective well-being (AWB). "Directly" means that AWB does not fully mediate the relationship between the perceptions of OV and AC.

AWB is one of the most important components of psychological well-being, or happiness (Daniels, 2000; Grant et al., 2007). Studying happiness is valuable for several reasons: (1) happiness is valuable *per se* (Cameron et al., 2003; Diener, 2000); (2) happiness associates with higher performance and better organizational functioning (Fredrickson, 2003; Wright and Cropanzano, 2004); (3) happiness is a fundamental ingredient of the "good life and good society" (Diener et al., 2003, p. 405). AC is an attachment characterized by an identification to and involvement with the organization (Allen and Meyer, 2000). Studying the AC antecedents is important because affectively-committed individuals tend to perform their jobs better and be more productive (Allen and Meyer, 2000; Jaramillo et al., 2005; Meyer and Herscovitch, 2001; Meyer et al., 2002; Riketta, 2002).

"Affective events theory" (Weiss and Cropanzano, 1996) helps to support the mediating relationship. This theory suggests that stable work environments influence the occurrence of positive and negative affective events. Experiencing these events leads employees to experience affective states. Affective states, in turn, may lead to work attitudes. The work environment's features also directly influence the work attitudes. In coherence with such theory, working in a virtuous context is an important affective event, thus triggering higher AWB and leading individuals to experience higher AC (Lilius et al., 2008).

The paper structures as follows: (1) discussing arguments for supporting the hypothesized model; (2) showing the method and results; (3) presenting discussion and conclusions; (4) discussing the limitations of the study and suggesting avenues for future research. Before proceeding, a clarification is necessary: regarding OV, the study focuses on psychological climates (James et al., 2008), without aggregating the individual's perceptions at the organizational level. Studying psychological climate seems an appropriate way to investigate well-being and AC because people's subjective perception and evaluation are most significant for happiness and satisfaction, not so much the objective situation itself (Haller and Hadler, 2006; Rego and Cunha, 2008a; Rego et al., 2009).

3. Hypothesized model

3.1. Studying antecedents of AC

AC is possibly the most studied component of organizational commitment (Meyer et al., 2002; Riketta, 2002). AC leads to fewer intentions to quit the organization (Allen and Meyer, 1996; Vandenberghe and Tremblay, 2008), lower turnover (Allen and Meyer, 1996; Maertz et al., 2007; Meyer et al., 2002), reduced absenteeism (Allen and Meyer, 1996; Eby et al., 1999; Somers, 1995), more customer-oriented behaviors (Chang and Lin, 2008), and improved in-role and extra-role performance (Allen and Meyer, 1996; Jaramillo et al., 2005; Meyer et al., 2002; Riketta, 2002; Vandenberghe et al., 2004).

Thus, to strive for better performance, organizations must be able to develop their employees' AC (Meyer and Herscovitch, 2001). The literature suggests a wide range of antecedents (Allen and Meyer, 1996; Meyer et al., 2002), including demographic variables, locus of control, organizational support, transformational leadership, role ambiguity, role conflict, competence-related variables, and organizational justice. Job involvement, positive and negative affects, and several facets of job satisfaction also emerge as important correlates of AC (Allen and Meyer, 1996; Meyer et al., 2002). However, studies neglect variables such as happiness and OV as possible antecedents (Herrbach, 2006; Thoresen et al., 2003).

3.2. AWB as a component of happiness

Happiness is a subjective experience: people are happy to the extent that they believe themselves to be happy. Scholars tend to treat "happiness" as psychological well-being, a multidimensional construct covering several components, including AWB (i.e., the frequent experience of positive affects and infrequent experience of negative affects), competence, aspiration, autonomy, integrative functioning, and satisfaction (Daniels, 2000; Diener, 2000; Lyubomirsky et al., 2005). This paper focuses on AWB. Daniels (2000) proposes an AWB at work construct comprising five bi-polar dimensions: anxiety–comfort, depression–pleasure, boredom–enthusiasm, tiredness–vigor, and anger–placidity. He reports empirical evidence supporting the five-factor model. Empirical evidence by Rego et al. (Rego and Cunha, 2008a, 2009a; Rego et al., 2009) also supports the model, although only after removing several items. Rego and Cunha (2008a) and Rego et al. (2010) also find

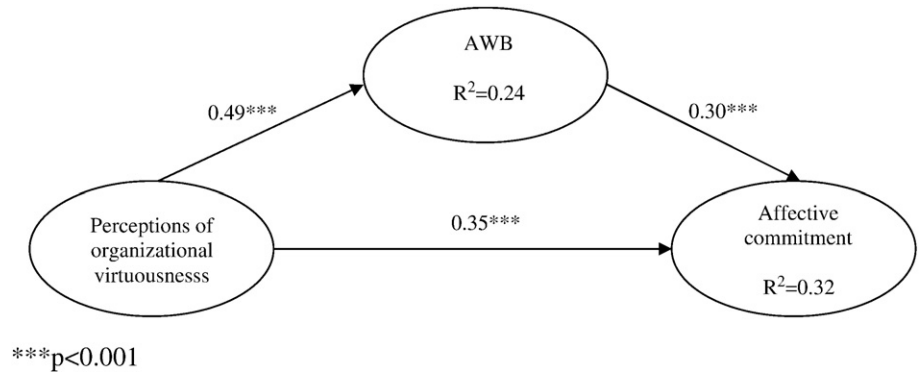

Fig. 1. Structural equation modeling for predicting AC (standardized path coefficients).

that a second-order factor model, with the five factors loading onto an overall AWB factor, fits the data reasonably well. Through usefulness analysis, Rego et al. (2010) also show that overall AWB increases the R^2 value of organizational citizenship behavior above and beyond the five AWB components. Therefore, the commonalities among the five AWB components justify considering AWB as a core construct, instead of considering their components separately.

3.3. AWB predicting AC

Considering that AC is an affective-based bond to the organization, AWB at work is possibly a good predictor of this attitude (Weiss and Cropanzano, 1996). That is to say, if individuals experience AWB at work, they develop an affective attachment with the workplace. Empirical evidence supports such a prediction (Fisher, 2002; Wegge et al., 2006; Mignonac and Herrbach, 2004). For example, Lilius et al. (2008) suggest that frequent experiences of positive emotion at work may lead to pleasant emotional associations with the workplace and accumulate over time into strengthened AC to the organization (Fisher, 2002; Weiss and Cropanzano, 1996). As suggested by the broaden-and-build model (Fredrickson, 1998, 2003; Wright and Cropanzano, 2004), AWB at work may lead individuals to experience work as meaningful, thus assuming work as a mission rather than as a "job", which in turn makes them more affectively attached to their organizations and more committed to improving organizational performance. Positive emotions at work may also make the job intrinsically rewarding, thus promoting AC (Eby et al., 1999; Kuvaas, 2006). Hence: H_1. Individuals who experience higher AWB at work develop higher AC.

3.4. Perceptions of OV predicting AC

Employees tend to reciprocate treatment by their organizations by adjusting their attitudes accordingly. Positive perceptions of OV may lead employees to feel gratitude for working in such an organization (Emmons, 2003; Fredrickson, 1998), to perceive organizational support, and to develop relational psychological contracts with the organization, thus reciprocating with higher affective commitment (Coyle-Shapiro, 2002; Eisenberger et al., 2001). They may also feel that they are carrying out meaningful work, thus bringing their entire self (physical, mental, emotional, and spiritual) to the organization, and take on work more as a mission than as a mere "job", which in turn makes them more affectively attached to their organizations (Gavin and Mason, 2004; Milliman et al., 2003; Wright and Cropanzano, 2004). Hence: H_2. Individuals with better perceptions of OV develop higher AC.

3.5. Perceptions of OV predicting AWB

Several authors (e.g., Cameron et al., 2004) suggest that exposure to virtuousness produces positive emotions such as love, empathy, awe, zest, and enthusiasm. High-quality connections (Dutton and Heaphy, 2003; Staw and Barsade, 1993) within virtuous contexts may also nurture perceptions of meaningful work, thus promoting positive emotions (Arnold et al., 2007; Kets de Vries, 2001). Observing OV, employees may also feel recognized as valuable emotional and intellectual beings, and not just "human resources". Feeling this recognition, they may develop stronger feelings of gratitude toward the organization and its members, and such feelings may increase their well-being (Fredrickson, 1998). Thus, the third hypothesis follows: H_3. Employees with better perceptions of OV develop higher AWB.

3.6. AWB mediating the relationship between the perceptions of OV and AC

If perceptions of OV influence AWB, and AWB influences AC, then the perceptions of OV likely influence AC through the mediating role of AWB. Mediation is possibly partial because the perceptions of OV also influence AC through the mechanisms supporting the second hypothesis. Affective events theory (Weiss and Cropanzano, 1996) is a useful framework to integrate the relationships between the three constructs (Mignonac and Herrbach, 2004; Wegge et al., 2006) and to support such a partial mediation relationship. Affective events are organizational occurrences that spark emotional reactions. This study does not measure them directly (Fisher, 2002), but rather suggests that the perceptions of OV lead employees to experience positive events (e.g., being treated with courtesy and/or compassion; receiving assistance for carrying out a difficult task) which, in turn, give rise to positive affects/emotions. Positive emotions arise because such events favor the individuals' goals, interests, needs, and well-being (Lazarus, 1991; Mignonac and Herrbach, 2004; Spector and Fox, 2002).

Using the affective events theory framework, Lilius et al. (2008) present theoretical and empirical evidence suggesting that the employees' feelings of compassion at work may lead them to experience positive emotions, and that frequent experiences of positive emotions at work may lead to pleasant emotional associations with the workplace and accumulate over time into strengthened AC to the organization (Fisher, 2002; Weiss and Cropanzano, 1996; Fredrickson, 1998, 2003). Thus, theoretical and empirical evidence allows hypothesizing: H_4. AWB partially mediates the relationship between perceptions of OV and AC.

4. Method

4.1. Participants and procedures

The study uses a convenience sample of 205 individuals from 14 small and medium companies. Organizations operate in several industries (plastics, moulds, glass, plaster, and rubber), their sizes ranging from 11 to 270 employees. Individuals report their perceptions of OV, AWB, and AC. To reduce common method biases, the study uses different scale endpoints, formats, and ranges for the predictor, criterion, and mediator measures (Podsakoff et al., 2003; see the next three sub-sections). In each organization, the researchers personally contact a member of the top management team, asking for cooperation and permission to query as many and as great a range of employees as possible. The number of employees queried in each organization ranges between 7 and 21 (mean: 14.1). Only individuals with an organizational tenure of six months or longer participate in the study, as this appears to be the minimum time necessary for people to gain a reliable impression of their organizations.

Answers are anonymous and delivered directly to the researchers under sealed cover. Employees reported age, gender, organizational tenure, schooling years, and marital status. These variables enter for control, because they relate to well-being and/or affective commitment (e.g., Meyer et al., 2002; Rego and Cunha, 2009b). The job is not solicited because the researchers conjecture that, in the cultural context of Portuguese organizations (Rego and Cunha, 2009c), asking for "too much" personal information may generate a high number of non-responses due to fear of being identified. Females account for 40.6%; 56.2% are married; mean age is 39.5 years (standard deviation: 9.8); mean organizational tenure is 14.6 years (sd: 10.9 years). 26.5% have six schooling years, 25.4% nine years, 31.9% twelve years, and 16% a university degree.

4.2. Organizational virtuousness measurement

The study measures the perceptions of OV through the 15 six-point items proposed by Cameron et al. (2004), after translation and back translation. Respondents report the degree to which the statements are false (1) or true (6).

The construct has both reflective and formative features (Coltman et al., 2008; Wilcox et al., 2008). For example, the latent construct is a combination of its indicators, and variation in item measures causes variation in the construct (formative). However, items share a common

theme and as expected they have high positive intercorrelations (reflective). As Edwards and Bagozzi (2000) show, a simple formative/reflective categorization may be simplistic (see also Bollen and Ting, 2000). Wilcox et al. (2008, p. 1221) also point out that "constructs are not inherently reflective or formative and the items themselves do not always provide guidance as to which model to chose".

Considering earlier research (Rego et al., 2010), a confirmatory factor analysis tests the second-order factor model, the five OV dimensions (Cameron et al., 2004) being indicators of the same underlying construct. The study uses the following criteria to evaluate model fit (Byrne, 1998; Hatcher, 1994; Kline, 2005): (a) chi-square/degrees of freedom ratio (values below 2–3 are acceptable); (b) root mean square error of approximation (RMSEA; values equal to or below 0.08 are acceptable), and (c) goodness of fit index (GFI), non-normed fit index (NNFI), and comparative fit index (CFI; values equal to or higher than 0.90 are acceptable). The findings show that fit indices are acceptable and/or very close to the cutoff values (Table 1). To obtain a composite OV score: (1) the study averages the items for each of the five subscales to get a composite average for each subscale; (2) then, the study averages the averages for each of the five subscales. Cronbach Alpha is 0.90.

4.3. Affective well-being measurement

The study measures AWB with the Daniels (2000) instrument, covering the five dimensions mentioned above, and later used by Rego et al. (Rego and Cunha, 2008a, 2009a,b; Rego et al., 2009) in the Portuguese context. Each dimension includes six items, three of which express the frequency of negative affect, and three the frequency of positive affect. The researchers invite the participants to think about their feelings over the last three months (Suh et al., 1996) in the organization and to answer on a 7-point scale ranging from never (1) to always (7). The construct also has both reflective and formative features (Coltman et al., 2008; Wilcox et al., 2008). For example, the latent construct is a combination of its indicators, and variation in item measures causes variation in the construct (formative). However, items share a common theme and as expected they have high positive intercorrelations (reflective).

Considering that studies by Rego et al. mentioned above require removing several items for reaching a well-fitted 5-factor model, a confirmatory factor analysis tests the five-factor model before testing the second-order factor model. Considering the unsatisfactory fit indices (e.g., RMSEA: 0.12; GFI: 0.67), standardized residuals and modification indices locate the sources of misspecification, leading to the removal of 14 items (see the bottom of Table 2) after deliberation based on both techniques. A well-fitted 16-item model emerges (Table 2). Three reliabilities are higher than 0.70, although two are slightly lower (0.65; 0.66). All Lambdas except four (0.45, 0.48, 0.49, 0.40) are higher than 0.50. This model is similar to the one Rego and colleagues identify in earlier studies (Rego and Cunha, 2008a, 2009a,b; Rego et al., 2009).

For testing the impact of removing items, the study compares the mean differences across some groups, both with and without "problematic" items. For example, the study computes the mean score on the comfort scale, with the final versus the six original items, for gender. Then, the study compares gender using the *d* statistic (i.e., the standardized mean difference). With the six items, the means for the two groups differ 0.05 standard deviation units. With the three items, the between-group difference is 0.11, the difference in *d* being 0.06. For pleasure, enthusiasm, vigor, and placidity, the differences in *d* are, respectively, 0.08, 0.03, 0.05, and 0.14. The same procedure compares married and unmarried participants. The differences in *d* are 0.02, 0.09, 0.01, 0.15, and 0.01, respectively for comfort, pleasure, enthusiasm, vigor, and placidity. Considering that all differences in *d* except one in each comparison are less than or equal to 0.10 (Robert et al., 2006), the impact of removing items seems not to be problematic. The correlations between the scores computed with three versus six items are 0.93, 0.91, 0.89, 0.75, and 0.83, respectively for comfort, pleasure, enthusiasm, vigor, and placidity.

Table 1
Confirmatory factor analysis (2nd-order factor model; completely standardized solution) for OV.

	Lambdas	Cronbach Alphas	Fit indices
Optimism		0.63	
We are optimistic that we will succeed, even when faced with major challenges.	0.50		
In this organization we are dedicated to doing good in addition to doing well.	0.60		
A sense of profound purpose is associated with what we do here.	0.72		
Trust		0.70	
Employees trust one another in this organization.	0.59		
People are treated with courtesy, consideration, and respect in this organization.	0.74		
People trust the leadership of this organization.	0.72		
Compassion		0.77	
Acts of compassion are common here.	0.68		
This organization is characterized by many acts of concern and caring for other people.	0.76		
Many stories of compassion and concern circulate among organization members.	0.77		
Integrity		0.80	
This organization demonstrates the highest levels of integrity.	0.70		
This organization would be described as virtuous and honorable.	0.78		
Honesty and trustworthiness are hallmarks of this organization.	0.83		
Forgiveness		0.71	
We have very high standards of performance, yet we forgive mistakes when they are acknowledged and corrected.	0.62		
We try to learn from our mistakes here, consequently, missteps are quickly forgiven.	0.71		
This is a forgiving, compassionate organization in which to work.	0.73		
Organizational virtuousness		0.90	
Optimism	0.99		
Trust	0.98		
Compassion	0.86		
Integrity	0.91		
Forgiveness	0.99		
Chi-square			204.91
Degrees of freedom			85
Chi-square/ degrees of freedom			2.4
Root mean square error of approximation			0.08
Goodness of fit index			0.88
Comparative fit index			0.91
Non-normed fit index			0.89

Table 2
Confirmatory factor analysis for AWB (completely standardized solution).

	1st-order factor model			2nd-order factor model		
	Lambdas	Cronbach Alphas	Fit indices	Lambdas	Cronbach Alphas	Fit indices
Anxiety–comfort[a]		0.65			0.65	
Anxious (r)	0.56			0.56		
Worried (r)	0.45			0.43		
Tense (r)	0.79			0.80		
Calm	0.48			0.48		
Depression–pleasure[a]		0.80			0.80	
Happy	0.87			0.87		
Cheerful	0.66			0.66		
Pleased	0.81			0.81		
Boredom–enthusiasm[a]		0.82			0.82	
Enthusiastic	0.67			0.67		
Motivated	0.85			0.85		
Optimistic	0.81			0.82		
Tiredness–vigor[a]		0.73			0.73	
Active	0.75			0.75		
Alert	0.49			0.49		
Full of energy	0.72			0.72		
Anger–placidity[a]		0.66			0.66	
Aggressive (r)	0.40			0.40		
Angry (r)	0.72			0.69		
Annoyed (r)	0.72			0.75		
Overall AWB					0.78	
Comfort				0.72		
Pleasure				0.77		
Enthusiasm				0.86		
Vigor				0.66		
Placidity				0.68		
Chi-square			172.62			192.24
Degrees of freedom			94			99
Chi-square/degrees of freedom			1.9			2.0
Root mean square error of approximation			0.06			0.07
Goodness of fit index			0.90			0.90
Comparative fit index			0.92			0.91
Non-normed fit index			0.90			0.89

(r) Reverse-coded items.
[a] Removed items are: comfortable, relaxed (anxiety–comfort), depressed, gloomy, miserable (depression–pleasure), bored, dull, sluggish (boredom–enthusiasm), tired, sleepy, fatigued (tiredness–vigor), at ease, patient and placid (anger–placidity).

Then, the study tests a second-order factor model, where the five AWB dimensions load on a higher AWB factor. Fit indices are satisfactory, only the NNFI index being lower than (although very close to: 0.89) the cutoff value (Table 2). To obtain a composite AWB score: (1) the study averages the items for each of the five subscales to get a composite average for each subscale; (2) then, the study averages the averages for each of the five subscales. Cronbach Alpha is 0.78.

4.4. Affective commitment measurement

For measuring AC, the study uses three 7-point items: (1) I am proud to tell others that I am part of this organization (Mowday et al., 1979); (2) I have a strong affection for this organization; (3) I feel like "part of the family" at my organization (Allen and Meyer, 1990). Rego et al. (Rego and Cunha, 2008b; Rego et al., 2007) use and validate the items in Portuguese and Brazilian contexts. Individuals report the degree to which each statement applies to them (1: does not apply to me at all; 7: applies to me completely). AC indicators are reflective (Edwards and Bagozzi, 2000). To obtain the AC score for each employee, the study averages the three items. Cronbach Alpha is 0.79.

4.5. Discriminant validity between the three constructs

The study uses confirmatory factor analysis to compare the fit indices of five factor models covering the OV, AWB and AC constructs. Considering that OV and AWB are core constructs, the study uses the respective five components as indicators. For AC, the study uses the three manifest variables. The five models are: (1) the three-factor model (OV; AWB; AC); (2) three two-factor models (OV and AWB merged; OV and AC merged; AWB and AC merged); (3) the one-factor model (merging the 13 indicators/items in a single factor). Only the three-factor model fits the data reasonably well (RMSEA: 0.08; GFI: 0.89; CFI: 0.91). Comparing this factor model with each one of the other four models shows significant changes in χ^2 relative to the difference in degrees of freedom (e.g., comparison with the one-factor model: $\Delta\chi^2_{(3)} = 329.91$; $p < 0.001$).

4.6. Common method variance and controlling for clustering the data

Because the same survey instrument collects all dependent and independent variables, the study explores the extent to which common method variance is a concern (Podsakoff et al., 2003). After estimating a full measurement model, the study re-estimates the same model after adding an uncorrelated method factor (Williams et al., 1989). The fit statistics improve only slightly (e.g., RMSEA moves from 0.080 to 0.075) and the comparison of both models shows no significant change in χ^2 relative to the difference in degrees of freedom ($\Delta\chi^2_{(16)} = 39.46$; $p = 0.09$). The finding suggests that common method variance does not appear to be a serious threat to this research.

For assessing if aggregating individual scores at the organization level (Bliese, 2000) is statistically justifiable, the study estimates intraclass correlation (ICC), a measure of within-group consensus. Although no strict rule exists, James (1982) suggests 0.12 as the cutoff value. For all variables, ICC are lower than 0.05. These findings suggest that aggregating scores is not justifiable.

Table 3
Means, standard deviation and correlations.

	Mean	SD	1	2	3	4	5	6	7
1. Gender	—	—	—						
2. Age	39.5	9.9	0.01	—					
3. Org. tenure	14.6	10.9	−0.04	0.79***	—				
4. Schooling (1)	2.4	1.0	−0.15*	−0.51***	−0.48***	—			
5. Marital status (2)	—	—	−0.07	0.32***	0.19**	−0.13	—		
6. Organiz. virtuousness (3)	4.3	0.7	0.08	0.04	0.02	−0.14	0.17*	—	
7. Affective well-being (4)	5.0	0.7	0.07	0.03	0.07	−0.14	0.05	0.50***	—
8. Affective commitment	5.3	1.0	−0.00	0.11	0.11	−0.05	0.05	0.50***	0.46***

*$p<0.05$; **$p<0.01$; ***$p<0.001$.
(1) 1: six schooling years; 2: nine years; 3: 12 years; 4: university degree.
(2) 0: unmarried; 1: married.
(3) Mean score of the five organizational virtuousness dimensions.
(4) Mean score of the five AWB dimensions.

5. Results

Table 3 shows the means, standard deviations, and correlations. Marital status correlates positively with the perceptions of OV. Perceptions of OV relate positively with AWB and AC. AWB and AC also intercorrelate positively.

Hierarchical regression analyses test the degree to which AWB mediates the relationship between perceptions of OV and AC. The procedure suggested by Baron and Kenny (1986) tests the mediation effects. For controlling the effects of gender, age, organizational tenure, schooling years, and marital status, these variables enter as control variables. Table 4 shows the results of the mediation test: (a) Perceptions of OV predict 26% of unique variance of AC, thereby meeting the first condition for mediation; (b) Perceptions of OV predict 26% of AWB. Thus, the findings support H_1 and the second condition for mediation; (c) When the independent (OV) and the mediating variable (AWB) enter in the regression for predicting AC, AWB predicts 4% of unique variance of AC (H_2 supported), and the relationship between perceptions of OV and AC decreases (Beta decreases from 0.52 to 0.40). Thus, the findings reveal a partial mediation (H_3 supported).

Sobel's (1982) test allows gaining additional support for the mediation model. The test assesses whether the mediating variable (AWB) carries the effects of the independent variable (perceptions of OV) to a dependent variable (AC). The resulting statistic measures the indirect effect of the perceptions of OV on AC by way of AWB. The test supports the mediating effect ($z=5.17$; $p<0.001$).

Structural equation modeling (using LISREL with the maximum likelihood estimation method) tests the causal model. Fig. 1 presents the findings, depicting the standardized path coefficients. All predicted paths are significant, saturating the model, the fit being perfect. The findings support the three hypotheses, suggesting that perceptions of overall OV predict AC both directly and through the mediating role of AWB. The fit indices of the full mediated model (i.e., without the path between OV and AC) are unsatisfactory (RMSEA: 0.34).

Table 4
Hierarchical regression analysis.

	Affective well-being		Affective commitment		
	1st step	2nd step	1st step	2nd step	3rd step
Gender	0.03	0.01	−0.03	−0.05	−0.05
Age	−0.06	−0.01	0.04	0.09	0.09
Organizational tenure	0.04	0.03	0.09	0.09	0.08
Schooling	−0.16	−0.07	−0.01	0.08	0.10
Marital status	−0.01	−0.08	−0.04	−0.11	−0.09
F	0.84		0.60		
R^2	0.02		0.02		
Organizational virtuousness		0.51***		0.52***	0.40***
F		10.99***		11.19***	
R^2		0.28		0.28	
ΔR^2		0.26		0.26	
Affective well-being	—	—			0.25***
F	—	—			11.75***
R^2	—	—			0.32
ΔR^2					0.04

*$p<0.05$; **$p<0.01$; ***$p<0.001$.

6. Analysis, discussion, and conclusions

6.1. Making sense of the main findings

For building a "stronger science of organizational behavior" (Wright and Quick, 2009), more theoretical and empirical efforts must be made to identify sources of the fruitful association between healthy organizations and healthy individuals (Kets de Vries, 2001; Wilson et al., 2004). Considering that healthy organizations require a committed workforce, and that AWB contributes to (or reflects) employees' health, this study contributes to addressing this challenge. Perceptions of OV predict AC, both directly and through the mediating role of AWB, thus supporting some of the main assumptions of the affective events theory framework (Weiss and Cropanzano, 1996). Individuals experience their perceptions of OV as salient emotional events (or as organizational factors that lead to affective events) that promote their positive feelings about the organization and give rise to positive attitudes toward the organization and strengthen affective organizational commitment (Fisher, 2002; Lilius et al. 2008; Weiss and Cropanzano, 1996). Herrbach (2006, p. 633) also suggests that "certain features of the work environment lead to positive affect through consistent activation of the appetitive system of the person, but also, parallel to this, generate affective commitment because they contribute to the mind-set of desire that characterizes this form of commitment".

The study responds to the call from the positive organizational studies movement (e.g., Cameron et al., 2003; Caza and Caza, 2008; Wright and Quick, 2009) to seek a deeper understanding of the conditions that create positive states in organizations. The main conclusions are that organizations and leaders can promote a happier and more affectively-committed workforce if they encourage (in a genuine and sustainable way) positive perceptions in their employees regarding OV. Considering the potentially positive impacts of employees' happiness at work and affective commitment on their performance, the study also suggests that promoting a virtuous organizational climate may impact productivity positively. As Wright and Cropanzano (2004, p. 338) point out, "It is reasonable and highly practical for both business executives and management scholars to understand that happiness is a valuable tool for maximizing both personal betterment and employee job performance."

6.2. Implications for management

Literature suggests that employees' AC is crucial for promoting individual and organizational performance (Allen and Meyer, 1996; Meyer et al., 2002; Riketta, 2002). This study indicates that

organizations and managers may promote such a bond if they invest in employee happiness at work (Fisher, 2002; Muse et al., 2008). Considering that positive emotions foster performance (Fredrickson, 2003; Wright and Cropanzano, 2004), such an investment may produce not only a more committed workforce, but also a more productive one. One implication is that, as Mignonac and Herrbach (2004) suggest, organizations should explicitly seek to favor positive affective effects among their workforce, thus enabling employees' happiness and commitment, and sustaining organizational health (Wilson et al., 2004).

By showing that the perceptions of OV predict AC, either directly or through the mediating role of AWB, this study provides practitioners with possible routes to act in favor of such a happier and more committed workforce. To build virtuous psychological climates, managers should care about how employees perceive the organization and its managers, paying attention to a number of aspects: (a) a virtuous sense of purpose in the organizational actions and policies; (b) an optimistic perspective toward challenges, difficulties, and opportunities; (c) a respectful and trustful way of acting; (d) a high level of honesty and integrity at every organizational level; (e) interpersonal relationships characterized by caring and compassion; (f) the combination of high standards of performance with a culture of forgiveness and learning from mistakes.

Bill George (2003), former CEO of Medtronic, provides an excellent illustration of how to develop a virtuous sense of purpose among employees: inviting patients to share their experiences with Medtronic employees, allowing the latter to understand how important their work is for improving (and saving) peoples' lives. Edmondson (2008) provides examples of combination of high standards of performance with a culture of forgiveness and learning from mistakes. Luthans et al. (2007) provide suggestions for improving employees' optimism (and other psychological capabilities). Authentic leadership behaviors (Avolio et al., 2004; George, 2003) may foster organizational contexts characterized by honesty, integrity, trust, compassion, and caring.

One must stress that virtuous speeches and the promotion of positive perceptions without a sustainable base of virtuousness creates an organizational vulnerability to employee cynicism and retaliatory behaviors, harming performance and threatening the very survival of the organization (Glynn and Jamerson, 2006). For achieving virtuous and healthy workplaces, management must promote both positive perceptions and authentic positive actions.

6.3. Limitations and (other) future studies

The study collects dependent and independent variables simultaneously from the same source. This raises the risk of introducing common method variance. Future studies should collect data for dependent and independent variables at separate moments. This would reduce the respondent's tendency to search for similarities in the questions and to maintain consistency in the answers. Another way to minimize these risks is to use a multiple source method, with some individuals reporting their perceptions of organizational features, and others expressing their levels of AWB and AC. This would imply using an aggregated level of analysis for measuring organizational (rather than psychological) climates.

Another limitation is that some reliabilities are lower than the 0.70 cutoff, thus, future studies may improve the psychometric properties of the measurement instruments. Other fragilities of the AWB measurement instrument are worth mentioning. Dropping several items was necessary, the same happening in other studies (Rego and Cunha, 2008a, 2009a,b; Rego et al., 2009). Although the findings (e.g., the *d* statistic for comparing groups with the full versus the short version) suggest that item removal is not problematic, one should not discard the possibility that removal may reduce the content coverage of the construct domain. Another consequence of the items' removal is that four AWB dimensions end up being measured exclusively with items of a single emotional pole (i.e., positive *or* negative). This finding leads to questioning if the five AWB dimensions are really bi-polar or, rather, the positive and negative items suggested by Daniels (2000) for measuring each AWB dimension actually represent different dimensions. In a post-hoc analysis, this study finds that a ten-factor model (for each dimension, one factor comprising the positive emotional states, the other comprising the negative ones) fits the data better than the five-factor model. However, the model is not workable because several reliabilities and Lambdas are far below the recommended cutoffs. Future studies may include a greater number of positive and negative items/emotional states and test if, in fact, each bi-polar dimension comprises two dimensions or not.

Considering the inaccuracy of retrospective measures of affective states, assessing AWB repeatedly in real time and then aggregating these reported scores into a measure of AWB experienced over the time period of interest (Fisher, 2002) would be better. One possibility is to use experience sample method for measuring the employees' perceptions of virtuous events and their (consequent or concomitant) affective states (Miner et al., 2005). This method would allow (a) exploring the dynamics of organizational functioning and individual's emotional states over time, and (b) reducing the risks associated with the use of declarative instruments that rely on the respondent's memory (Mignonac and Herrbach, 2004).

The use of cross-sectional research design also precludes the drawing of firm conclusions about the causality nexus between the study variables. Other causal links are also plausible. For example: (a) the employees' affective states may influence their perceptions of the organizational features (Brief and Weiss, 2002), rather than the other way around; (b) AC may lead individuals to describe their organizations in a more positive/virtuous way; (c) AWB may contribute to virtuous acts (Snyder and Lopez, 2002), thus increasing OV. Participants in the study come from a single culture and work in small and medium companies. Future studies may test if the empirical findings of the present research replicate in other cultures and types of organizations.

Complementary explanations for the results come from variables such as high-quality connections (Dutton and Heaphy, 2003), perceptions of meaningful work (Kets de Vries, 2001), feelings of gratitude (Emmons and McCullough, 2003; Fredrickson, 1998), psychological empowerment (Menon, 2001), psychological capital (Luthans et al., 2007), and organizational identification (Dutton et al., 1994). For example, by working in virtuous contexts, employees may develop high-quality connections that allow them to satisfy social and security needs and thus experience greater happiness at work. Observing OV may make the employees perceive the job (as well as the workplace) as more meaningful in their lives, thus experiencing greater happiness and reciprocating with higher AC. Employees may also develop gratitude feelings for working in virtuous workplaces, thus reciprocating with higher organizational identification and affective commitment. They may also feel psychologically empowered, various authors establishing that psychological empowerment relates significantly and positively to AC (e.g., Liden et al., 2000). Observing OV may also foster psychological capital (Luthans et al., 2008) and enhance personal strengths (Park and Peterson, 2003), promoting the ability of employees to absorb threat and trauma, bounce back from adversity, sustain hope and optimism, and maintain resilience and "toughness" while facing negative events, thus being able to avoid/reduce negative emotions, and/or preserve or recover positive ones (Cameron et al., 2004). Incorporating these and other variables in future studies may allow investigating the more subtle mechanisms through which perceptions of OV give rise to employees' AWB and AC. Such variables may "give life" to the links proposed by the affective events theory, not yet sufficiently investigated. As Wegge et al. (2006, p. 251) argue, affective events theory "is such a broad paradigm that neither the mechanisms of how events lead to affect (…) nor how affect leads to consequences are discussed in enough detail (…)".

6.4. Concluding remarks

Cameron (2003, p. 52) argues that, "[o]ne irony associated with organizational virtuousness is that without demonstrated benefits,

virtuousness has not captured much interest in organizational research". This study contributes to capture the interest of human resource management researchers and practitioners for this topic, which is still at their periphery of attention. Taking into account the contributions of the positive psychology (Snyder and Lopez, 2002), positive organizational behavior (Nelson and Cooper, 2007), and positive organizational scholarship (Caza and Caza, 2008) movements for the organizational and psychological sciences, now is perhaps the time to develop a positive-people-management (PPM) perspective. The expression "people" rather than "human resources" seeks to avoid the mere instrumentalism present in most western HRM approaches (Jackson, 2002). PPM may be an important contribution for enriching the "soft" developmental human relations approach, as opposed to the utilitarian instrumentalism approach. The latter sees people in an organization as mere resources to be used for achieving the ends of the organization, rather than as valued stakeholders, capable of development, worthy of trust, and providing inputs through participation and informed choice. A PPM approach may help to develop "dignity at work" (Sayer, 2007), promoting the strengths and capabilities that the three movements mentioned above suggest to be important for individual, team, and organizational flourishing. A PPM view would not diminish the importance of the traditional processes and ideas, but would, instead, constitute a positive framework for anchoring the study of the classical and emerging concepts in the development of more positive organizations.

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