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## Organizational citizenship behavior: An intergenerational study

Les comportements de citoyenneté organisationnelle: une étude intergénérationnelle

Nicolas Raineri\* Pascal Paillé\* Denis Morin\*\*

#### Abstract

While the colloquial literature on generations has become a quilt of clichés, attempts to systematically examine generational differences in the workplace have been scarce and the results inconsistent. In this study, we use social exchange theory to investigate whether membership in the Baby Boomers versus the Generation X group influences the relationships of organization- and colleaguedirected support and commitment with organizational citizenship behavior. By means of a multisample analysis, we show that both cohorts ultimately share more resemblances than dissimilarities. However, our findings support the popular belief that Generation X is less willing to exchange desirable

#### Résumé

Alors que les clichés générationnels sont devenus monnaie courante dans la littérature populaire, peu d'études examinent d'une manière systématique la réalité des différences intergénérationnelles en milieu de travail. De plus, les résultats sont généralement inconsistants et contradictoires. Dans cet article, nous faisons appel à la théorie de l'échange social pour déterminer si l'appartenance à un groupe générationnel, celui des baby-boomers versus celui de la génération X, influence les relations entre le soutien perçu de l'organisation et des collègues, l'engagement envers l'organisation et les collègues, et les comportements de citoyenneté organisationnelle. Dans le cadre du modèle proposé, le test d'invariance indique

#### Key-words

Organizational citizenship behavior, commitment, generation, social exchange, support, Baby Boomers, Generation X

#### Mots-clés

Comportements de citoyenneté organisationnelle, engagement, génération, échange social, soutien perçu, baby-boomers, génération X

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work outcomes for employer support. Implications are discussed.

qu'il existe davantage d'affinités que de différences entre les deux cohortes. Cependant, nos résultats soutiennent l'idée communément admise selon laquelle les membres de la génération X seraient moins disposés à échanger des attitudes et comportements positifs en retour du soutien de leur employeur. Les implications sont discutées.

In recent years, general media, popular press and work semi-Inars have led employees and managers to believe in the existence of legitimate intergenerational differences that need to be addressed in the workplace. Business practitioners, especially those within human resources departments, have become increasingly concerned with the so-called challenges of multigenerational management and its potential impact on organizational performance (Benson & Brown, 2011). Built on the idea that different generations possess different mind-sets, ways of thinking, acting and behaving, companies have been attempting to adapt and tailor their policies to draw out the best from each generational group (Campbell, Hoffman, Campbell, & Marchisio, 2011). However, comprehension of generational characteristics and their effects on work outcomes is based on disputed and limited data. Indeed, the assumptions reflected in popular literature are often anchored in stereotypes derived from idiosyncratic examples, while research examining generational differences from the human resources perspective has been scarce, in addition to reporting mixed results (e.g., Benson & Brown, 2011; Brunetto, Farr-Wharton, & Shacklock, 2011; Cennamo & Gardner, 2008; d'Amato & Herzfeldt, 2008; Hess & Jepsen, 2009; Wallace, 2006). In this respect, only a handful of studies (Klammer, Skarlicki, & Barclay, 2002; Lamm & Meeks, 2009; Lub, Blomme, & Bal, 2011; Shragay & Tziner, 2011) have focused on employee extra-role performance and its antecedents. Clearly, more research is needed to assess the reality of generational differences and the extent to which they influence individual orientations in the workplace.

The purpose of this paper is to address the aforementioned limitations by examining the generational effect on the relationships of organization- and colleague-directed support and commitment with organizational citizenship behavior (OCB) (see Figure 1). Social exchange theory is used as a basis for understanding attitudes toward reciprocity of the two prominent generational groups in today's workforce, the Baby Boomers and Generation X (Smola & Sutton, 2002). In so doing, this study contributes to the generational, social exchange and OCB literature by extending recent research (e.g., Benson & Brown, 2011; Bishop, Scott, & Burroughs, 2000). Our findings support the idea that Baby Boomers are generally more inclined to exchange commitment and citizenship behavior for employer support than members of Generation X. However, the data indicated no significant differences across cohorts in their exchange relationships with colleagues.

The paper begins with an introduction to the social exchange theory, followed by an overview of the literature on generations and their relevant differences. Next, the research hypotheses are developed, albeit with caution, regarding somewhat disputed generational characteristics. The research method, analytical sequence and results are then presented. Finally, the implications of the paper are discussed in the context of the generational, social exchange and OCB literature.



FIGURE 1: Hypothesized structural model.

Parameters for the measurement portion and disturbance terms are not presented for the sake of parsimony.

#### Theoretical background

#### Social exchange theory

According to Cropanzano and Mitchell (2005, p. 874), "social exchange theory (SET) is among the most influential conceptual paradigms for understanding workplace behavior." SET explains the regulation of social relations based on a powerful and general premise: the norm of reciprocity (Gouldner, 1960). While the reciprocation ideology seems to be widely shared among individuals, levels of mutuality, however, differ, depending on individual orientation (Eisenberger, Cotterell, & Marvel, 1987; Eisenberger, Huntington, Hutchison, & Sowa, 1986). Contrary to economic trade, social exchange is discretionary, and the form, degree or time of reciprocation are neither specified nor enforceable (Blau, 1964). Although the norm suggests equivalence in terms of help received and returned, the value placed on the exchange relationship is idiosyncratic. This means that a person will feel obligated to a donor (e.g., an organization, supervisor or colleague) only when he or she is freely provided with something he/she cares about (Schaninger & Turnipseed, 2005). In short, people tend to reward volitional and positive dispositions toward themselves, by returning the benefits they perceive having received.

Given these considerations, work experiences fostering employee perceptions of support, trust and justice have been found to contribute to the social exchange dynamic (Aryee, Budhwar, & Chen, 2002; Moorman, Blakely, & Niehoff, 1998; Stinglhamber, de Cremer, & Mercken, 2006). Of most importance is perceived organizational support (POS): through reciprocity, it promotes desirable work outcomes such as commitment or citizenship behavior. In other words, the greater the POS, the more likely are employees to identify with, and make voluntary extra efforts on behalf of the organization (cf. Rhoades & Eisenberger, 2002). Support has also been examined at the supervisory (e.g., Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002) and colleague level (e.g., Bishop et al., 2000; Pearce & Herbik, 2004; Paillé, 2012), providing similar results. While a considerable amount of research has been conducted on organi-

zational and supervisor foci of support, the colleague entity is in need of greater attention (Bishop, Scott, Goldsby, & Cropanzano, 2005; Howes, Cropanzano, Grandey, & Mohler, 2000). Similarly, studies on social exchange theory have been limited in the generational context (e.g., Benson & Brown, 2011; Brunetto et al., 2011; Hess & Jepsen, 2009) and the present paper fills a gap in this respect. With the core ideas that comprise SET succinctly introduced, we can now turn to a review of the generational literature.

#### The generation concept

A generation is usually viewed as a group of people that share years of birth and unique socio-political life events during their formative years which, in turn, generate and structure relatively stable, albeit not immutable, individual practices and worldviews (Eyerman & Turner, 1998; Mannheim, 1952; Schuman & Scott, 1989), including ways of thinking, acting and behaving in the workplace (Arsenault, 2004; Kupperschmidt, 2000; Smola & Sutton, 2002). However, arguments have been raised regarding the reality and meaning of birth cohorts. While some scholars tend to support the historical, sociological and cultural foundations underlying the generational principles (e.g., Campbell et al., 2011; Dencker, Joshi, & Martocchio, 2008; McMullin, Comeau, & Jovic, 2007), others are more skeptical and argue that differences based on age location are chiefly attributable to experience or to the maturation process (e.g., de Meuse, Bergmann, & Lester, 2001; Jorgensen, 2003). Nonetheless, in the absence of longitudinal studies, the small number of research using data collected across time (Smola & Sutton, 2002; Twenge, Campbell, Hoffman, & Lance, 2010) suggest that work values are influenced more by generation than by experience and maturation effects.

The literature identifies as many as six generational groups. The most prevalent in today's workforce are the Baby Boomers (Boomers) and Generation X (GenX). Despite some discrepancies concerning the birth years that encompass both groups, it is generally accepted that Boomers were born in the mid-1940s to the mid-1960s, and that GenX is comprised of individuals born from the mid-1960s to the early 1980s (Scott-Ladd, Travaglione,

Perryer, & Pick, 2010; Shragay & Tziner, 2011; Twenge et al., 2010). The presumed solidarity and affinities among each 20-year-span cohort are thought to be formed through social upheaval, such as wars or recessions, as well as the surrounding political and cultural background experienced in youth, when people are coming of age and constructing the self, the effects of which serve to distinguish one generation from another (Jurkiewicz & Brown, 1998; Kupperschmidt, 2000; McMullin et al., 2007).

Baby Boomers grew up in times of economic prosperity and full employment in the wake of World War II, when most companies tended to offer well-defined lifetime career structures (d'Amato & Herzfeldt, 2008; Schuman & Scott, 1989). Hence, they are often described as optimistic, valuing job security and stable work environments. They also seem to believe that one should pay membership dues to the organization through hard work and long-term commitment (Kupperschmidt, 2000; Smola & Sutton, 2002). In contrast, the formative years of Generation X were influenced by mass media and technological breakthroughs in a world marked by a series of economic downturns and the end of the Cold War (Park & Gursoy, 2012; Schuman & Scott, 1989). Its members witnessed their parents' occupational insecurity in a period of rapid change and high unemployment, which resulted in increased family instability. As a result, members of GenX are assumed to be independent and adaptable workers who develsuspicious and cvnical view oped toward employee-organization relationship (Jurkiewicz & Brown, 1998; Kupperschmidt, 2000; Smola & Sutton, 2002), leading them to commit to their careers and the people they work with rather than their employer as a whole (Neil, 2010; Shragay & Tziner, 2011). In short, the Boomers and GenX are presumed to possess differentiated work orientations and values, thus distinct patterns of organizational behavior.

Although the lack of strong empirical evidence makes it difficult to fully appreciate the extent to which these characterizations are based on representative (as opposed to anecdotal) differences (Benson & Brown, 2011; Park & Gursoy, 2012), they provide generational ideal-types that can be confronted with reality (Lub, Bijvank, Bal, Blomme, & Schalk, 2012; McMullin et al., 2007).

Accordingly, it would not be unreasonable to think that in a social exchange relationship, members from GenX (in comparison with the Boomers) would exhibit reciprocation wariness toward positive appreciation and support received from their employer. Their perception of company benevolence could be influenced by their supposed skepticism regarding the organizational and managerial context. Indeed, people who suspect being taken advantage of and are doubtful of the motives underlying others' favorable treatment appear to exercise greater caution in reciprocating help and tend not to contribute much to a social relationship (Eisenberger et al., 1987). However, it has also been reported that workers from GenX tend to be more responsive to colleague recognition and encouragement (Benson & Brown, 2011; Wallace, 2006). In other words, considering several foci is of critical interest when examining intergenerational differences toward support and reciprocity, the expression of which is generally found in employee commitment and organizational citizenship behavior (Cropanzano & Mitchell, 2005; Rhoades & Eisenberger, 2002).

While organization theory has explored support, commitment and OCB extensively, attempts to compare these variables across generations have been scarce, and the results inconsistent. For instance, Brunetto et al. (2011) and d'Amato and Herzfeldt (2008) maintain that the Baby Boomers are more committed to their organization as a whole than Generation X, whereas the data of Benson and Brown (2011), Ferres, Travaglione and Firns (2003) and Lub et al. (2012) indicate no significant difference in the level of organizational commitment between these generations. Namely, results based on mean differences predominant in the literature do not clarify the generational effect on the relationships of work attitudes and behaviors. Although some studies have used regression models and provided substantial contributions in this respect (e.g., Benson & Brown, 2011; Cennamo & Gardner, 2008; Hess & Jepsen, 2009; Lamm & Meeks, 2009; Park & Gursoy, 2012; Shragay & Tziner, 2011; Wallace, 2006), this method of analysis (as opposed to the structural equation modeling used here) does not allow simultaneous estimates of direct and indirect relationships between latent variables by considering the structural model as a whole. Consequently, this paper aims to bridge the gap in the research by answering the following two questions. First, does the influence of perceived support on commitment, and in turn, commitment on OCB, differ between the Boomers and GenX? Second, do different foci of support and commitment, i.e., the organization and the colleague, contribute to explaining these differences?

#### Development of research hypotheses

#### Perceived support and employee commitment

As mentioned, the norm of reciprocity forms the basis of social exchange relationships and perceived organizational support is crucial to this dynamic in the workplace. Many studies have found that employees are prone to exchange desirable work outcomes for employer support, not least their commitment to the organization as a whole (cf. Cropanzano & Mitchell, 2005; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Rhoades & Eisenberger, 2002). Commitment is defined as the relative strength of an individual's affective bond to a particular organization, reflecting his or her state of psychological attachment (Allen & Meyer, 1990; O'Reilly & Chatman, 1986). This attitude is of value, because it expresses adherence to company objectives as well as the desire to exert great effort on behalf of, and to maintain employment in, the organization (Mowday, Steers, & Porter, 1979; Porter, Steers, Mowday, & Boulian, 1974). The more employees feel that they are being esteemed and cared about, the more inclined they are to return the favor through equivalence in mutuality. That is, the greater the POS, the greater the organizational commitment. In this respect, the meta-analyses conducted by Meyer et al. (2002) and Rhoades and Eisenberger (2002) reported strong positive relationships between POS and affective commitment:  $r_c = .63 \ (k = 18, N = 7,128)$  and .73 (k = 18, N = 7,128)42, N = 11,706), respectively.

Following the development by Reichers (1985) and Becker (1992), it is now widely accepted that employees can commit to several foci other than the organization, such as the supervisor or colleagues (Becker, Billings, Eveleth, & Gilbert, 1996; Cohen, 2003; Meyer & Allen, 1997). Although supervisory and organiza-

tional foci of support are conceptually distinct, Eisenberger et al. (2002) argued that perceived supervisor support is an antecedent of POS, suggesting that employees tend to identify supervisors with the organization rather than construing their actions as chiefly idiosyncratic. Given this consideration, it was decided not to include the supervisor target in this research. Colleagues, however, generally have the same status as the focal employee (i.e., they share the same condition of subordination), which makes their actions less likely to be confounded with those of the organization (Chiaburu & Harrison, 2008). Indeed, perceived colleague support (PCS), defined as the extent to which employees believe their peers value their contribution and are concerned about their well-being (Bishop et al., 2000), and colleague commitment, which refers to the psychological state that binds two or more colleagues (Pearce & Herbik, 2004), have been empirically distinguished from POS and organizational commitment (Bishop et al., 2005). The extent to which coworkers have benevolent dispositions toward each other and experience positive interpersonal relationships was also found critical to explain attachment to colleagues (Vandenberghe, Bentein, & Stinglhamber, 2004). In other words, employees seem to engage in social exchange relationships with their peers whereby PCS is positively related to colleague commitment (Bishop et al., 2000; Howes et al., 2000; Paillé, 2009, 2012; Pearce & Herbik, 2004).

Last, despite the interest shown by Benson and Brown (2011) and Wallace (2006) in PCS, no research has explored the generational differences in the relationships between organization- and colleague-directed support and commitment. Nonetheless, the literature on generations suggests that Boomers are more engaged toward their employer as a whole, whereas members of GenX (GenXers) are more responsive to rewarding relationships with colleagues (Neil, 2010; Park & Gursoy, 2012; Shragay & Tziner, 2011). Therefore, it would be conceivable that:

*Hypothesis* 1a: Boomers will show a significantly stronger positive relationship between POS and commitment to the organization than GenXers.

*Hypothesis* 1b: GenXers will show a significantly stronger positive relationship between PCS and commitment to colleagues than Boomers.

#### Organizational citizenship behavior

OCB is typically defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the (efficient and) effective functioning of the organization" (Organ, 1988, p. 4; Organ, Podsakoff, & MacKenzie, 2006, p. 3). In other words, OCB concerns employees' most voluntary and spontaneous contributions, which manifest the willingness to make extra efforts on behalf of the organization beyond prescriptions. The major forms of OCB derived from the dimensions developed by Organ (1988) are helping behaviors (e.g., assisting others with work-related problems or defusing interpersonal disagreements), civic virtue (e.g., keeping abreast of, and participating in, the life of the company) and sportsmanship (e.g., not complaining about trivial matters) (Podsakoff & MacKenzie, 1994). These individual actions, albeit mundane, contribute to smoothing the workflow and, ultimately, enhancing performance at both the group (Podsakoff, Ahearne, & MacKenzie, 1997) and organizational levels (Podsakoff & MacKenzie, 1994). Research also indicates that employee commitment to the organization is one of the key variables in the development of OCB, meaning the greater the organizational commitment, the higher the level of citizenship behavior. In this respect, the meta-analyses conducted by LePine, Erez and Johnson (2002) and Meyer et al. (2002) reported positive relationships between (affective) commitment and OCB:  $r_c = .20$ (k = 17, N = 5,133) and .32 (k = 22, N = 6,227), respectively.

Although some scholars (e.g., Williams & Anderson, 1991) have broken down OCB into actions directed toward individuals (e.g., helping behaviors) and actions directed toward the employer (e.g., civic virtue, sportsmanship), the findings of LePine and colleagues (2002, p. 61) support consideration of Organ's (1988) OCB as a latent concept with dimensions that "should be thought of as somewhat imperfect indicators of the same underlying construct." Consistent with the substantive definition of OCB and

the contribution of LePine et al.'s systematic review, this paper does not distinguish in the development of research hypotheses between dimensionalities of OCB (OCB is operationalized as a second-order latent construct, in line with the mainstream). With respect to attitudinal antecedents of citizenship behavior, colleague commitment has been found, over and above organizational commitment, to account for unique variance in overall OCB (Bishop et al., 2000). That is, identification with peers is thought to increase the propensity of the focal employee to make contributions that go beyond the strict job description.

Further, OCB clearly falls within social exchange theory: it is based on choice and volition, and it constitutes a form of reciprocation for the benevolent dispositions and favorable treatments received (Organ et al., 2006). This means that support provided by the organization (Rhoades & Eisenberger, 2002) and colleagues (Deckop, Cirka, & Andersson, 2003) is expected, separately, to directly influence the level of employees' discretionary efforts. In the generational context, however, little research (Klammer et al., 2002; Lamm & Meeks, 2009; Lub et al., 2011; Shragay & Tziner, 2011) has been conducted on OCB, and neither organizational nor colleague support or commitment have been tested in relation to citizenship behavior. Nonetheless, given that GenXers (in comparison with the Boomers) appear less tempted to return favors from or to identify with the company, and prefer instead to develop interpersonal bonds and reciprocal relationships with coworkers (Benson & Brown, 2011; Neil, 2010; Park & Gursoy, 2012; Shragay & Tziner, 2011; Wallace, 2006), it would seem reasonable to surmise that:

*Hypothesis* 2a: Boomers will show a significantly stronger positive relationship between commitment to the organization and OCB than GenXers.

*Hypothesis* 2b: GenXers will show a significantly stronger positive relationship between commitment to colleagues and OCB than Boomers.

*Hypothesis* 3a: Boomers will show a significantly stronger positive relationship between POS and OCB than GenXers.

*Hypothesis* 3b: GenXers will show a significantly stronger positive relationship between PCS and OCB than Boomers.

#### Method

#### **Participants**

Data were collected from 943 public employees of a Quebec government agency. They voluntarily completed a survey distributed during work hours with the support of the agency. Participants were informed that their answers would remain strictly confidential. A total of 704 completed and usable questionnaires were returned, for an overall response rate of 74.7%. Although such a response rate is excellent (Babbie, 2007), we controlled for non-response bias by comparing early and late (10%) respondents in terms of selected variables (Armstrong & Overton, 1977). Since no significant difference was observed, non-response bias did not appear to be a threat to external validity.

With 444 Baby Boomers (born between 1944 and 1963) and 238 members of Generation X, (born between 1964 and 1983), the final sample consisted of 682 public sector employees. Some 75% of the respondents were females (in the same proportion between Boomers and GenXers), 59% had tenure, i.e., permanent status (Boomers: 66%; GenXers: 46%), and 25% possessed a postgraduate degree (Boomers: 24%; GenXers: 28%). Nearly half of the Boomers (49%) had a minimum of twenty years of professional experience, while almost the same proportion of GenXers (44%) had been working in the public sector for less than five years. Although the gender distribution is skewed, this is consistent with the data from the government of Quebec, which employs a majority of women (Secretary of the Conseil du Trésor, 2010).

#### Measurement

As the study was conducted in a French-language context, English versions of the measures included in the survey were translated into French following a standard translation-backtranslation procedure (Brislin, 1980). Based on a Likert-type scale, all items

were measured on a 10-point scale ranging from 1 (completely disagree) to 10 (completely agree).

Perceived organizational support and perceived colleague support. For practical reasons, POS was measured with three high-loading items from the short version of the Survey of Perceived Organizational Support (items 1, 4 and 9, with factor loadings of .71, .74 and .83, respectively; Eisenberger et al., 1986). According to Rhoades and Eisenberger (2002), this is a common practice that does not appear problematic, since the original scale is unidimensional and has high internal reliability (Cronbach's  $\alpha = .97$ ; Eisenberger et al., 1986). Both facets of the definition of POS were represented, namely, valuation of employee contributions and care about employee well-being. To measure PCS, the same items were adapted by substituting the term colleagues for organization. This is consistent with most studies measuring perceived support of foci other than the organization, for instance, the supervisor (Eisenberger et al., 2002; Stinglhamber et al., 2006) or colleagues (Bishop et al., 2000; Howes et al., 2000). PCS scales have demonstrated good levels of internal reliability in previous research ( $\alpha = .90$ ; Bishop et al., 2000).

Organizational commitment and colleague commitment. Affective commitment to the organization was measured with three items from the scale developed by Vandenberghe, Stinglhamber, Bentein and Delhaise (2001;  $\alpha=.82$ ). The measure was validated in its full six-item version (Vandenberghe et al., 2004) as well as in a shortened four-item form (Bentein, Stinglhamber, & Vandenberghe, 2002). Based on the same literature, affective commitment to colleagues was measured using a three-item short form (Bentein et al., 2002) of the scale developed by Vandenberghe et al. (2001;  $\alpha=.89$ ).

Organizational citizenship behavior. OCB was measured with nine items from the scale developed by Podsakoff and MacKenzie (1994;  $\alpha$  = .92). Helping, civic virtue and sportsmanship ( $\alpha$  = .89, .82 and .84, respectively; Podsakoff & MacKenzie, 1994) were each represented by three items. Descriptive statistics appear in Tables 1 and 2 (the correlation matrix is available upon request from the authors).

#### Data analysis

We examined the hypothesized differences across generations (the Boomers and GenX) with the EQS 6.1 structural equation modeling (SEM) program (Bentler, 2006), by means of a multisample invariance analysis. SEM provides a strong statistical framework for testing hypotheses concerning multiple populations as well as complex causal relationships. First, SEM allows simultaneous cross-group comparisons of the measurement scales; and second, estimations of direct and indirect relationships between latent variables are made by considering the structural model as a whole. We performed our analyses using the robust covariance matrix by the Satorra-Bentler maximum likelihood procedure to deal with multivariate non-normality of the data (Satorra & Bentler, 1986, 1988). This method of estimation accepts the standard normal theory, but scales the test statistics in relation to non-normality of observations (Bentler, 2006).

Before testing our hypotheses, preliminary analyses were conducted in order to assess the measurement model and the common method variance using confirmatory factor analysis (CFA). Consistent with the multi-sample invariance method, we then considered the hypothesized model for each population and analyzed the equivalence of sets of parameters in a nested sequence of configural, metric and structural invariance tests (Hair, Black, Babin, & Anderson, 2010; Vandenberg & Lance, 2000). This procedure evaluates how the successive imposition of equality constraints affects model fit and identifies any untenable inter-group restriction.

Estimations were based on the Satorra-Bentler chi-square (S-B  $\chi^2$ ), the non-normed fit index (NNFI), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA) robust statistics (Bentler, 2006). Concurrent values lower than .05 or .08 for the RMSEA and greater than .95 or .90 for both the NNFI and CFI are reflective of good and acceptable fit to the data, respectively (Marsh, Hau, & Wen, 2004; Medsker, Williams, & Holahan, 1994). Non-invariance between groups was accepted when the difference in S-B  $\chi^2$  showed a significant decrement in model fit, and when the probability level of the equality constraints

as determined by the Lagrange Multiplier Test (Silvey, 1959) was below .05 (Byrne, 1994; Chou & Bentler, 1990).

#### Results

#### Preliminary analyses

CFA was used to estimate the full measurement model with the seven scales and twenty-one items. The results indicate that the model fits the data well (S-B  $\chi^2_{(168)}$  = 419.65; NNFI = .95; CFI = .96; RMSEA = .05). As Table 1 shows, the measures demonstrated satisfactory levels of composite reliability (CR) with values higher than .70 (Hair et al., 2010; Nunnally & Bernstein, 1994). Following Fornell and Larcker (1981), all scales verified convergent validity at both the item and construct level, with the exception of sportsmanship. Although its factor loadings are above the .50 threshold, the average variance extracted (AVE) by the factor is a little below the recommended cutoff (.46 versus .50), showing that the variance due to measurement error is larger than the variance captured by the construct. However, while the validity of the sportsmanship instrument per se is questionable, the AVE from the second-order measure of organizational citizenship behavior (.56) is acceptable.

The scales also ratified discriminant validity as each construct shared more variance with its items than it did with other constructs in the model (Fornell & Larcker, 1981). Namely, the AVE by a construct was greater than the squared correlations between the factors (see Table 2, the square root of the AVE for each factor appears in the diagonal of the correlation matrix). Overall, the psychometric properties of the measurement model in terms of reliability, convergent validity and discriminant validity were thus satisfactory.

Table 1: Measurement model: reliability and convergent validity of the scales (N = 682).

Scales	Factor Loading	CR	AVE				
Perceived organizational support (Cronbach's $\alpha = .95$ )		.95	.86				
My employer really cares about my well-being	.94						
My employer considers my aspirations and values	.94						
My employer appreciates my contribution	.90						
Perceived colleague support ( $\alpha = .87$ )		.88	.71				
My colleagues consider my aspirations and values	.89						
My colleagues really care about my well-being	.82						
My colleagues appreciate my contribution	.81						
Affective commitment to the organization ( $\alpha = .93$ )		.93	.81				
I am proud to belong to (name of agency)	.94						
(Name of agency) has a great deal of personal meaning for me	.93						
I really feel that I belong in (name of agency)	.84						
Affective commitment to colleagues ( $\alpha = .93$ )		.93	.82				
My work group means a lot to me	.93						
I feel proud to be a member of my work group	.92						
I really feel that I belong in my work group	.86						
Helping ( $\alpha = .85$ )		.86	.66				
I act as a "peacemaker" when others in the agency have disagreements	.86						
I take steps to try to prevent problems with other personnel in the agency	.85						
I am a stabilizing influence in the agency when dissention occurs	.73						
Civic virtue ( $\alpha = .76$ )		.78	.56				
I attend and actively participate in agency meetings	.85						
I attend information sessions that agents are encouraged but not required to attend	.85						
I attend functions that are not required but help the agency image	.50						
Sportsmanship ( $\alpha = .71$ )		.72	.46				
I focus on what is wrong with the agency rather than the positive side of it (R)	.70						
I tend to make problems bigger than they are at work (R)	.67						
I always find fault with what the agency is doing (R)	.67						
% Variance explained	69.56						
Note: Satorra-Bentler v2 = 419.65; robust non-normed fit index (NNEI) = 95; robust							

Note: Satorra-Bentler  $\chi 2_{(168)} = 419.65$ ; robust non-normed fit index (NNFI) = .95; robust comparative fit index (CFI) = .96; robust root mean square error of approximation (RMSEA) = .05.

 $<sup>\</sup>hbox{(R) indicates item is reverse scored; CR, composite reliability; AVE, average variance extracted.}$ 

Latent variables	Factor Mean	SD	1	2	3	4	5	6	7
1. Perceived organizational support	6.30	2.69	.93						
2. Perceived colleague support	7.70	1.85	.46*	.84					
3. Affective commitment to the organization	7.03	2.49	.55*	.44*	.90				
4. Affective commitment to colleagues	7.69	2.13	.54*	.59*	.63*	.91			
5. Helping	5.76	2.36	.14*	.22*	.23*	.26*	.81		
6. Civic virtue	6.94	2.28	.35*	.49*	.46*	.46*	.43*	.75	
7. Sportsmanship	7.60	1.82	.21*	.34*	.37*	.30*	.05	.22*	.68

Table 2: Mean, standard deviation and discriminant validity of the scales (*N* = 682).

Note: The diagonal entries are the square roots of the AVE (average variance extracted); sub-diagonal entries are the correlations among the latent factors.

p < .01.

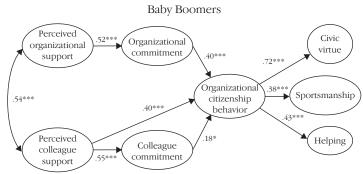
As the study was cross-sectional and used self-report measures, we controlled for common method bias to ensure that systematic error variance did not account for the observed relationships between the constructs. Following Podsakoff, MacKenzie, Lee and Podsakoff (2003), we re-estimated the measurement model with a common latent method factor added to the constructs' indicators to partition the variance between trait, method, and random error. For identification purposes, the method factor loadings were constrained to be equal. The results indicated no improvement in fit indices (S-B  $\chi^2_{(167)} = 416.73$ ,  $\Delta$ S-B  $\chi^2_{(1)} = 2.67$ , p > .05; NNFI = .95; CFI = .96; RMSEA = .05). Further, the method factor represented only a small portion (11%) of the total variance, suggesting that common method variance was not a serious threat to the validity of our findings.

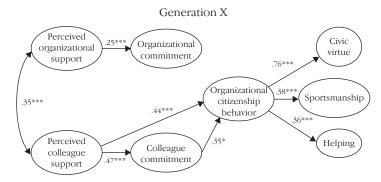
#### Multi-sample invariance analysis

Using the steps recommended by Bentler (2006), we conducted a multi-sample analysis to compare the strengths of the relationships between the latent variables under study. First of all, the hypothesized model (see Figure 1) was considered individually for each group. The relationships found to be statistically non-significant, one for the Baby Boomers and two for Generation X,

were excluded and the modified models re-estimated. As Table 3 shows, the fit was acceptable, separately, in the two samples (Boomers, S-B  $\chi^2_{(178)}$  = 380.75; NNFI = .94; CFI = .95; RMSEA = .05; GenX, S-B  $\chi^2_{(179)}$  = 349.45; NNFI = .91; CFI = .92; RMSEA = .06). Although it is tempting to draw inferences based on the observed differences (see Figure 2), the ratification of measurement invariance is a prerequisite to meaningful comparisons (Vandenberg & Lance, 2000).

FIGURE 2: Standardized path estimates of the hypothesized model for the Baby Boomers and Generation X.





Parameters for the measurement portion and disturbance terms are not presented for the sake of parsimony. \*p < .05; \*\*\* p < .01; \*\*\*\* p < .001

Therefore, the second step consisted of verifying the invariance of the instrument of measurement. This refers to a nested sequence of tests on the equivalence of the conceptual framework (configural invariance), and factor-loading calibration (metric invariance) across samples. Because one relationship

between the factors was found non-invariant in the previous stage, we performed a partial configural invariance analysis (Steenkamp & Baumgartner, 1998). Both individual models, the Boomers (N = 444) and GenXers (N = 238), were estimated simultaneously with no inter-group restrictions. The results yielded an adequate fit to the data (S-B  $\chi^2_{(357)} = 734.08$ ; NNFI = .93; CFI = .94; RMSEA = .06), demonstrating that the respondents of both generations shared the same frame of reference in defining the latent constructs. After constraining the factor loadings to be equal across samples, the  $\Delta S\text{-B}\ \chi^2$  test suggested no significant change in model fit ( $\Delta S$ -B  $\chi^2_{(14)} = 15.43, p > .05$ ), thus ratifying the metric and measurement invariance. Then, from Figure 2 it became clear that hypothesis 2a was in part supported, as members of GenX exhibited strictly no relationship (as opposed to a lower relationship than Boomers) between commitment to the organization and OCB. However, hypothesis 3a was rejected, since neither group presented a direct link between organizational support and OCB.

Thereafter, we assessed the structural invariance by adding intergroup equality constraints to freely estimated factor relationships. Because the decrement in model fit was significant in comparison to the metric model (see Table 3,  $\Delta$ S-B  $\chi^2_{(7)}$  = 18.22, p < .05), we released the constraint relative to the regression path between organizational support and organizational commitment, as suggested by the Lagrange Multiplier Test (p < .05, Bentler, 2006; Byrne, 1994; Chou & Bentler, 1990). Hypothesis 1a was thus supported. Finally, the results suggested no significant change in model fit compared to the metric model ( $\Delta$ S-B  $\chi^2_{(6)}$  = 9.65, p > .05), indicating partial structural equivalence. In other words, hypotheses 1b, 2b and 3b were rejected: the relationships between colleague support, colleague commitment and OCB were not statistically different across generations.

Mediation tests also indicated that the indirect effects of POS on OCB in the Boomers sample and PCS on OCB in both populations were significant at p < .05. Following Sobel (1987), we used the maximum likelihood and standard errors of direct path coefficients to construct a 95% confidence interval for the indirect effect. For the Boomers, the full indirect effect of POS on OCB

was  $0.12 \pm 0.05$  and the partial indirect effect of PCS on OCB was  $0.09 \pm 0.07$ . With respect to GenXers, the partial indirect effect of PCS on OCB was  $0.14 \pm 0.08$ .

TABLE 3. Fit indices and results of invariance tests.

Model	S-Bχ <sup>2</sup>	df	NNFI	CFI	RMSEA	Model comparison	$\Delta S$ -B $\chi^2$ ( $\Delta df$ )	Decision
Boomers $(N = 444)$	380.75	178	.94	.95	.05			
GenX $(N = 238)$	349.45	179	.91	.92	.06			
1. Partial configural invariance	734.08	357	.93	.94	.06	_	_	Accepted
2. Metric invariance	745.56	371	.94	.94	.05	1 versus 2	15.43 (14)	Accepted
3. Structural invariance	763.34	378	.93	.94	.06	2 versus 3	18.22 (7)*	Rejected
3'. Partial structural invariance	755.55	377	.94	.94	.05	2 versus 3'	9.65 (6)	Accepted

Note: Models are nested within each other: partial configural invariance (simultaneous model with no constraints), metric invariance (factor loadings equal), structural invariance (freed factor relationships equal), partial structural invariance (constraint released between organizational support and organizational commitment).

S-B $\chi^2$ , Satorra-Bentler chi-square; df, degree of freedom; NNFI, robust non-normed fit index; CFI, robust comparative fit index; RMSEA, robust root mean square error of approximation. \* p < .05

#### Discussion

#### Contribution of the study

The purpose of this paper was to examine the generational differences in the relationships of organization- and colleague-directed support and commitment with organizational citizenship behavior. We cautiously suggested, through the lens of social exchange theory, that the two prevailing generations in today's workforce, the Baby Boomers and Generation X, would exhibit differentiated work attitudes and behaviors toward organizational and colleague foci of support. Structural equation modeling results supported the idea that Boomers are generally more inclined to exchange commitment and citizenship behavior for employer support than members of GenX. However, the data

indicated no significant differences across cohorts in their exchange relationships with coworkers.

This study contributes to the generational, social exchange and OCB literature in several ways. First, it extends recent research on generations by proposing and testing a model where comparisons are made by considering a number of structural relationships simultaneously. We found that affective commitment to the organization completely mediated the effect of perceived organizational support on OCB for the Boomers. Conversely, GenXers did not appear to make voluntary extra efforts on behalf of their employer as a consequence of their adherence to the company's goals and values (for this group, organizational commitment did not account for OCB). This could be explained by the weaker relationship between POS and organizational commitment in the GenX sample. However, it is also possible that workers from this cohort manifest their attachment to the company through alternative outcomes such as work satisfaction, intention to stay or job performance, for instance.

Second, our results also suggest that the relationships between perceived colleague support, colleague commitment and OCB were comparable across generations. This is a valuable contribution, as it demonstrates that workers from GenX are not more receptive than Boomers, in the absolute, to rewarding relationships with colleagues. They merely favor reciprocal exchanges with peers rather than the organization as a whole. In relation to OCB, this could reflect a decoupling in the viewpoint of GenXers, between what is strictly enforceable by job requirements, i.e., fulfilling one's end of the bargain (which is the least the company expects), and discrete behaviors that are subsumed in daily interaction with coworkers.

Third, the direct relationship between PCS and OCB offers additional insight into employee motives to reciprocate in the workplace. Indeed, it would seem conceivable that proximity among coworkers creates a social exchange dynamic based on pragmatic considerations that need not necessarily be mediated by a strong affective bond between colleagues. Thus, in the presence of supportive peer relationships in the course of work activities, a lack of colleague commitment (one cannot possibly

identify with all of his or her fellow coworkers) would not be a sufficient obstacle for reciprocating in the form of OCB.

#### Limitations and future research

Notwithstanding its contributions, this study has a number of limitations that warrant consideration in future research. First, the data came from a single female-dominated sample of public sector employees, thus limiting the generalizability of the results. Although women were equally distributed in both the Boomers and GenX sub-samples (thereby controlling for gender differences across cohorts), prospective research would be required in a range of private sector organizations more representative of today's workforce. Secondly, despite previous findings that work values are influenced more by generation than by experience and maturation effects (Smola & Sutton, 2002; Twenge et al., 2010), the cross-sectional design used in this study may confound differences based on age location with socio-psychological developments due to career or life stages. In this respect, future research using time-lag methodologies might further the advancement of knowledge by controlling for age beyond mean difference analysis. Indeed, great insight would be gained by examining the generation effect across time in the pattern of relationships between key work attitudes and behaviors.

Thirdly, we speculated theoretically that members of GenX would reasonably exhibit reciprocation wariness toward favorable treatment from their employing company, given their alleged skepticism toward the organizational context. Although the results show that workers from this generation tend to exercise less effort than Boomers in returning the organization's help, they do not actually teach us about the underlying process. Additional research endeavors could be conducted to learn whether these differences derive from distinct exchange ideology (Eisenberger et al., 1986; Eisenberger et al., 1987) with respect to organizational foci. Fourthly, we tested a parsimonious model involving employee attitudes toward the employer and colleagues. This leaves the supervisor level of analysis and other key work-related variables such as psychological contract fulfillment, trust, satisfaction, willingness to stay or job performance (among

others) relatively unexplored. As such, the contributions of this developing literature (e.g., Benson & Brown, 2011; Brunetto et al., 2011; Hess & Jepsen, 2009; Lamm & Meeks, 2009; Park & Gursoy 2012; Shragay & Tziner, 2011; Wallace, 2006) need to be pursued further by considering more complex explanatory models in order to increase our overall understanding of generational characteristics as they relate to the employment condition.

Finally, in terms of organizational citizenship behavior, we contend that promising avenues of research are expected to be found at the colleague level of analysis. In line with previous advancements (e.g., Deckop et al., 2003), our results suggest that the extent to which coworkers help each other is critical to influence, not only the level of discretionary efforts directed at peers, but also toward the entire organization. Social relationships between colleagues are subsumed in daily organizational life, and pragmatic considerations may well bypass the benevolent intent of the exchange without having a significant impact on the link between perceived support and OCB. Albeit speculative, this possibility should be examined through theoretically informed perspectives alternatives to SET. This outlook appears all the more relevant that workers of the younger generation tend to show greater mutual relationships with colleagues than with the employer, eventually beneficial, however, to the organization as a whole.

#### References

Allen, N. J., & Meyer J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, 14(3), 396-402.

Arsenault, P. (2004). Validating generational differences: A legitimate diversity and leadership issue. *Leadership and Organization Development Journal*, *25*(2), 124-141.

Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23(3), 267-286.

Babbie, E. (2007). *The Practice of Social Research* (11th ed.). Belmont, CA: Wadsworth.

Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Review*, 35(1), 232-244.

Becker, T., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, 39(2), 464-482.

Benson, J., & Brown, M. (2011). Generations at work: Are there differences and do they matter? *International Journal of Human Resource Management*, 22(9), 1843-1865.

Bentein, K., Stinglhamber, F., & Vandenberghe, C. (2002). Organization-, supervisor-, and workgroup-directed commitments and citizenship behaviours: A comparison of models. *European Journal of Work and Organizational Psychology*, 11(3), 341-362.

Bentler, P. M. (2006). *EQS 6 structural equations program manual*. Encino, CA: Multivariate Software.

Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. *Journal of Management*, 26(6), 1113-1132.

Bishop, J. W., Scott, K. D., Goldsby, M. G., & Cropanzano, R. (2005). A construct validity study of commitment and perceived support variables: A multi-foci approach across different team environments. *Group & Organization Management*, 30(2), 153-180.

Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley.

Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C. Triandis & J. W. Berry (Eds.), *Handbook* 

of Cross-Cultural Psychology (pp. 398-444). Boston, MA: Allyn & Bacon.

Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2011). Communication, training, well-being, and commitment across nurse generations. *Nursing Outlook*, 60(1), 7-15.

Byrne, B. M. (1994). Testing for the factorial validity, replication, and invariance of a measuring instrument: A paradigmatic application based on the Maslach Burnout Inventory. *Multivariate Behavioral Research*, 29(3), 289-311.

Campbell, W. K., Hoffman, B. J., Campbell, S. M., & Marchisio, G. (2011). Narcissism in organizational contexts. *Human Resource Management Review*, *21*(4), 268-284.

Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891-906.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*(5), 1082-1103.

Chou, C.-P., & Bentler, P. M. (1990). Model modification in covariance structure modeling: A comparison among likelihood ratio, Lagrange multiplier, and Wald tests. *Multivariate Behavioral Research*, 25(1), 115-136.

Cohen, A. (2003). *Multiple commitments in the workplace: An integrative approach*. Mahwah, NJ: Lawrence Erlbaum Associates.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.

d'Amato, A., & Herzfeldt, R. (2008). Learning orientation, organizational commitment and talent retention across generations: A study of European managers. *Journal of Managerial Psychology*, 23(8), 929-953.

Deckop, J. R., Cirka, C. C., & Andersson, L. R. (2003). Doing unto others: The reciprocity of helping behavior in organizations. *Journal of Business Ethics*, 47(2), 101-113.

de Meuse, K. P., Bergmann, T. J., & Lester, S. W. (2001). An investigation of the relational component of the psychological contract across time, generation, and employment status. *Journal of Managerial Issues*, *13*(1), 102-118.

Dencker, J. C., Joshi, A., & Martocchio, J. J. (2008). Towards a theoretical framework linking generational memories to work-place attitudes and behaviors. *Human Resource Management Review*, *18*(3), 180-187.

Eisenberger, R., Cotterell, N., & Marvel, J. (1987). Reciprocation ideology. *Journal of Personality and Social Psychology*, *53*(4), 743-750.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565-573.

Eyerman, R., & Turner, B. (1998). Outline of a theory of generations. *European Journal of Social Theory*, 1(1), 91-106.

Ferres, N., Travaglione, A., & Firns, I. (2003). Attitudinal differences between Generation-X and older employees. *International Journal of Organisational Behaviour*, 6(3), 320-333.

Fornell, C., & Larker, D. F. (1981). Evaluating structural equations models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178.

Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Hess, N., & Jepsen, D. M. (2009). Career stage and generational differences in psychological contracts. *Career Development International*, 14(3), 261-283.

Howes, J. C., Cropanzano, R., Grandey, A. A., & Mohler, C. J. (2000). Who is supporting whom? Quality team effectiveness and perceived organizational support. *Journal of Quality Management*, *5*(2), 207-223.

Jorgensen, B. (2003). Baby Boomers, Generation X and Generation Y: Policy implications for defence forces in the modern Era. *Foresight*, *5*(4), 41-49.

Jurkiewicz, C. L., & Brown, R. G. (1998). Generational comparisons of public employee motivation. *Review of Public Personnel Administration*, 18(4), 18-37.

Klammer, J., Skarlicki, D. P., & Barclay, L. (2002). Speaking up in the Canadian military: The roles of voice, being heard, and generation in predicting civic virtue. *Canadian Journal of Behavioural Science*, *34*(2), 122-130.

Kupperschmidt, B. (2000). Multigeneration employees: Strategies for effective management. *Health Care Manager*, *19*(1), 65-76.

Lamm, E., & Meeks, M. D. (2009). Workplace fun: The moderating effects of generational differences. *Employee Relations*, 31(6), 613-631.

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *The Journal of Applied Psychology*, 87(1), 52-65.

Lub, X. D., Bijvank, M. N., Bal, P. M., Blomme, R. J., & Schalk, R. (2012) Different or alike? Exploring the psychological contract and commitment of different generations of hospitality workers. *International Journal of Contemporary Hospitality Management*, 24(4), 553-573.

Lub, X. D., Blomme, R. J., & Bal, P. M. (2011). Psychological contract and organizational citizenship behavior: A new deal for new generations? In J. S. Chen (Ed.), *Advances in Hospitality and Leisure* (Vol. 7, pp.109-130). Bingley, UK: Emerald.

Mannheim, K. (1928/1952). The problem of generations. In K. Mannheim (Ed.), *Essays on the Sociology of Knowledge* (pp. 276-322). London, UK: Routledge.

Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu & Bentler's (1999) findings. *Structural Equation Modeling*, *11*(3), 320-341.

McMullin, J., Comeau, T., & Jovic, W. (2007). Generational affinities and discourses of difference: A case study of highly skilled information technology workers. *British Journal of Sociology*, 58(2), 297-316.

Medsker, G., Williams, L., & Holahan, P. A. (1994). Review of current practices for evaluating causal models in organizational behavior and human resources management research. *Journal of Management*, 20(2), 439-64.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61(1), 20-52.

Moorman, R. H., Blakely, G. L., & Niehoff, B. P. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, *41*(3), 351-357.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247.

Neil, S. (2010). Leveraging generational work styles to meet business objectives. *Information Management Journal*, 44(1), 28-33.

Nunnally, J. C., & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.). New York, NY: McGraw-Hill.

O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492-499.

- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences.* Thousand Oaks, CA: Sage.
- Paillé, P. (2009). The relationship between support, commitment and intent to leave team: A social exchange perspective. *Team Performance Management*, 15(1-2), 49-62.
- Paillé, P. (2012). Do coworkers make the service customer? A field study in the public sector. *Review of Public Personnel Administration*, 32(4), 1-30.
- Park, J., & Gursoy, D. (2012). Generation effects on work engagement among U.S. hotel employees. *International Journal of Hospitality Management*, *31*(4), 1195-1202.
- Pearce, C. G., & Herbik, P. A. (2004). Citizenship behavior at the team level of analysis: The effects of team leadership, team commitment, perceived team support, and team size. *Journal of Social Psychology*, 144(3), 293-310.
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of workgroup performance. *The Journal of Applied Psychology*, 82(2), 262-270.
- Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behaviors and sales unit effectiveness. *Journal of Marketing Research*, *31*(3), 351-363.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603-609.

Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review, 10*(3), 465-476.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.

Satorra, A., & Bentler, P. M. (1986). Some robustness properties of goodness of fit statistics in covariance structure analysis. *1986 ASA Proceedings of the Business and Economic Statistics Section* (pp. 549-554). Alexandria, VA: American Statistical Association.

Satorra, A., & Bentler, P. M. (1988). Scaling corrections for chi-square statistics in covariance structure analysis. *1988 ASA Proceedings of the Business and Economic Statistics Section* (pp. 308-313). Alexandria, VA: American Statistical Association.

Schaninger, W. S., & Turnipseed, D. L. (2005). The workplace social exchange network: Its effect on organizational citizenship behavior, contextual performance, job satisfaction, and intention to leave. In D. L. Turnipseed (Ed.), *Handbook of Organizational Citizenship Behavior: A Review of 'Good Soldier' Activity in Organizations* (pp. 209-242). New York, NY: Nova Science.

Schuman, H., & Scott, J. (1989). Generations and collective memories. *American Sociological Review* 54 (3), 359-381.

Scott-Ladd, B., Travaglione, A., Perryer, C., & Pick, D. (2010). Attracting and retaining talent: Social organisational support as an emergent concept. *Research and Practice in Human Resource Management*, 18(2), 1-14.

Secretary of the Conseil du Trésor. (2010). *The Workforce of the Quebec Public Administration*. [L'effectif de la fonction publique du Québec]. Retrieved from http://www.tresor.gouv.qc.ca.

Shragay, D., & Tziner, A. (2011). The generational effect on the relationship between job involvement, work satisfaction, and organizational citizenship behavior. *Journal of Work and Organizational Psychology*, 27(2), 143-157.

Silvey, S. D. (1959). The Lagrange multiplier test. *The Annals of Mathematical Statistics*, *30*(2), 389-407.