

## **Can age make a difference? A moderated model of altruistic organizational citizenship behaviour antecedents**

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### ***Abstract***

This paper utilizes lifespan approaches to examine how the effects of fun at work, work-life balance, and perceived supervisor support on altruistic Organizational Citizenship Behaviour (OCB) are moderated by age. Based on multilevel analysis of a large sample of 6,182 employees in 37 companies, fun at work significantly predicted altruism towards co-workers for young employees only, while work-life balance predicted altruistic behaviours for mid- and old-age group employees. Contrary to expectation, age did not moderate the relationship between perceived supervisor support and altruism. These findings suggest further exploration is needed on how age qualifies the relationship between altruistic OCB and its antecedents. This is an especially crucial issue in light of demographic trends indicating further extension of employees' working lives.

**Keywords:** Altruistic organization citizenship behaviour, age, fun at work, work-life balance, perceived supervisor support

## **1 INTRODUCTION**

For a company to excel it is not enough to depend on employees fulfilling prescribed roles. The most successful companies inspire additional performances that are not specifically supported by mechanisms of economic exchange (Lambert, 2000). Among these extra-role behaviours, organizational citizenship behaviour (OCB) is defined as behaviour above and beyond the call of duty that is not explicitly recognized by the formal reward system (Konovsky & Pugh, 1994). This type of behaviour refers to additional tasks people do at work that benefit the organization, even though they are not in the job description and are difficult to enforce. The extant literature defines OCB as a multi-dimensional construct. The most established taxonomy, proposed by Organ (1988), includes five behavioural dimensions: altruism, courtesy, conscientiousness, sportsmanship, and civic virtue. Although much of the empirical literature has focused on Organ's (1988) five-dimensions framework, other studies have focused on specific OCB dimensions in isolation (LePine & Van Dyne, 1998, 2001). These studies aim to develop better understanding of a behaviour thought to be particularly relevant within a specific work setting (LePine, Erez, and Johnson, 2002). The present study follows this latter approach by focusing on altruistic OCB defined as helping others in the organization, for instance by assisting co-workers who have been absent or have heavy workloads, and orienting new people when it is not required (Smith, Organ and Near, 1983; Wagner & Rush, 2000). We focus on altruism because organizations are shifting away from the use of hierarchical structures and individualized jobs in favour of autonomous team-based structures that increase flexibility, knowledge-sharing, creativity, and innovation. Altruism is the most crucial of the five dimensions to the success of this new paradigm, making easier to manage the increasing interdependencies among team members (Koster, 2014). Furthermore, as proposed by Clarkson (2014), "we live in an age that is more ethically and socially aware" (p. 264) and we attach greater attention to more "unconventional" values such as altruism.

A substantial amount of research has been devoted to understanding the motivational bases of OCB. One possible explanation of what induces employees to engage in OCB is based on the concept of social exchange (Blau, 1964; Gouldner, 1960). According to this approach, employees engage in extra-role behaviours to respond to good or fair treatment they have received from co-workers, supervisors or the organization (Organ, 1988; 1990).

Our study utilizes a social exchange perspective, extending the existing research in two ways.

First, we contribute to the study of altruistic OCB antecedents by focusing on dimensions that have received less consideration in previous empirical studies. Specifically, we focus on organizational conditions expected to impact employees' psychological well-being. Previous literature found that experiencing positive moods and emotions at work fosters pro-social organizational behaviour. People in good moods may tend to be more empathetic, more respectful, and more helpful to others (Avey, Wernsing, and Luthans, 2008; George, 1991). In other words, they tend to engage in behaviours that reinforce their positive mood. Studying the conditions that enhance employee well-being and create a good place to work is therefore of utmost importance.

Second, we consider in our analyses the influence of age in moderating the relationship between contextual factors and altruistic OCB. Previous empirical research has shown that age and other demographic variables (including organizational tenure and employee gender) are unrelated to OCB in general, and altruistic OCB in particular (Podsakoff et al., 2000; Organ & Konovsky, 1989; Smith et al., 1983). However, rather than expecting a main effect of age, Wagner and Rush (2000) suggested to consider age as a moderator between altruistic OCB and its antecedents. Their study showed that predictors of altruism depend on the age of the organizational members. One of the possible explanations for why antecedents of altruistic OCB may vary with age rests on life span approaches. According to these theories, changes people undergo over the course of their lives affect the way they attach value to work outcomes and organizational benefits (Savickas, 2002; Super, 1957). Therefore, it is likely that the same benefit will engender different levels of individual obligation to the organization depending on the value it has for a particular employee. As Lambert suggests (2000, p. 802), the norm of reciprocity that sustains OCB "is universal, but it is not unconditional" as workers may differentially value identical benefits. Therefore, our theoretical model includes a set of variables that "per se" would be expected to favour the development of altruistic OCB, but are in fact age-sensitive, and tend to be valued differently by people in different life stages.

## **2 THEORETICAL BACKGROUND AND HYPOTHESES**

### **2.1 Altruistic organizational citizenship behaviour and positive moods**

Smith, Organ and Near introduced the concept of altruism in 1983 as that dimension of OCB that captures helping behaviour aimed directly and intentionally at specific persons in face-to-face situations (e.g., orienting new people, assisting someone with a heavy workload).

Previous research (Van Dyne, Graham et al., 1994) has identified both contextual and dispositional variables as antecedents of OCB, such as, from one side, fairness, equity and perceived organizational support and, from the other, personality. Organ and Ryan meta-analysis (1995) supports the conclusion that job attitudes

(such as affective commitment and leader supportiveness) are robust predictors of altruistic behaviours as compared to dispositional variables, and that tenure and gender do not account for much variance in this relationships. According to Podsakoff and colleagues (2000) there are four major categories of antecedents associated with the expression of OCB in general and of altruistic OCB in particular: individual characteristics, task characteristics, organizational characteristics, and leadership behaviours. Smith and colleagues (1983) found that a mood of positive affect (defined by job satisfaction as a characteristic mood state) is an important antecedent of altruism, affecting these helping behaviours directly. The authors' results are consistent with many social psychologists studies showing that people whom a mood of positive affect had been induced were more likely to behave altruistically.

There is evidence that experiencing positive moods and emotions tends to enhance performance at individual, group, and organizational levels. In their meta-analysis, Lyubomirsky and colleagues (2005) show that positive mood is related to an individual's "active involvement with goal pursuits and with the environment" (p. 804). Wright and Cropanzano (2000) found that psychological well-being is positively related to employee performance. Research has also specifically investigated whether positive mood at work fosters pro-social organizational behaviour. It is well-established in the extensive literature on social psychology that positive mood is linked to helping behaviour in a variety of settings (Salovey, Mayer, and Rosenhan, 1991). Building on this body of research, George (1991) found that positive mood at work enhances pro-social behaviour, particularly that component of pro-social behaviour defined as altruism. There are several theoretical rationales for why positive affect enhances altruistic behaviour (Carlson, Charlin, and Miller, 1988). First, employees in good moods perceive stimuli in a more positive light and tend to be more attracted to others and are therefore more likely to look favourably upon not only those they might help, such as co-workers and customers, but on helping opportunities as well (Carson and Adams, 1980). Additional evidences suggest that positive emotions bring people closer together, and help to maintain relationships and enable social interactions (Diener & Seligman, 2002).

Second, people in positive moods tend to be more helpful because being helpful enables them to maintain and reinforce their positive mood. Consistent with this line of reasoning, there is strong support for the idea that people in a positive mood are more likely to help others and engage in extra-role behaviours.

This theoretical and empirical evidence suggests that employees are more likely to engage in altruistic OCB in an organizational environment that fosters positive emotions (Barsade & Gibson, 2007). Therefore, analysing the conditions associated with such environments is of foremost importance. The conditions we focus on in this paper are fun at work, work-life balance, and perceived supervisor support.

### **2.1.1 Fun at work**

Traditionally, work and fun have been considered dichotomous; only recently has the idea of a "fun work environment" been associated with more satisfied and productive employees. According to Ford, McLaughlin and Newstrom (2003), a fun work environment is one that "intentionally encourages, initiates, and supports a variety of enjoyable and pleasurable activities that positively impact the attitude and productivity of individuals and groups" (p. 22). Such activities include social events and outings (e.g., company-wide trips), contests (e.g., singing), recognition of personal milestones (e.g., anniversaries), and public celebrations of professional achievements. Organizations are expected to differ in their attitudes towards fun at work and in the extent to which they tolerate or encourage fun, depending on the dictates of their cultural norms and values.

A few studies have begun to explore the positive influence of fun at work on various job attitudes and outcomes (Fluegge, 2008; Karl et al., 2005; Karl, Peluchette, and Harland, 2007). Karl and Peluchette (2007) found that experienced fun increased job satisfaction, and the relationship was stronger for individuals placing a high value on workplace fun. Experienced fun was also found to reduce employees' emotional exhaustion and emotional dissonance (Karl et al., 2007). Lamm and Meeks (2009) explored the links between workplace fun and job satisfaction, task performance and OCB, finding that the relationship was moderated by employees' membership in distinct generational cohorts. We intend for our paper to add empirical support to these initial studies by focusing on the influence of fun at work on the development of altruistic OCB. This view is consistent with the literature on employees' affective state, suggesting that when people are in a positive mood they tend to be more altruistic and more likely to help others (George, 1991). Therefore, we expect fun at work to enhance altruistic behaviours.

Hypothesis 1: Employees' perception of high level of fun at work will have a positive effect on altruistic OCB.

### **2.1.2 Work-life balance**

Work-life balance has gained greater attention in contemporary research and managerial practice due to several factors. There is evidence that work pressure has been intensifying in recent years: people are working more hours, and the intensity of work is increasing as well. Work-life conflicts are becoming more frequent,

specifically for professionals and knowledge workers who are more and more stretched by extensive projects and aggressive timelines (Messersmith, 2007). Moreover, people's values and attitudes are changing, and some authors posit that workers today assign greater importance to striking a balance between work and other aspects of their lives (Jorgensen, 2003). Other factors that have increased the prominence of the work-life balance debate include greater participation of women in the workforce, the ageing of the workforce, the increase in single-parent households and dual-career families, and the growing concern for health issues and the well-being of the population (Wood & de Menezes, 2010; Devi & Rani, 2012).

Work-life balance can be defined as “satisfaction and good functioning at work and at home with a minimum role conflict” (Clark, 2000; p. 349). While there is evidence that work-life imbalance is related to negative work outcomes such as turnover and turnover intentions, job dissatisfaction and burnout (Greenhaus, Parasuraman, and Collins, 2001), the results of studies testing the relationship between organizational performance and family-friendly practices are mixed, providing evidence for a positive relationship or no relationship between these two variables (Wood & de Menezes, 2010).

According to Osterman (1995), organizations that require high level of employee commitment and rely on employee ideas and initiative are more likely to adopt work-family programs because they induce or encourage this commitment. These results are consistent with social exchange theory and the possibility that work-life benefits may promote employee participation, commitment, and extra effort. Lambert (2000) found that workers' assessment of the usefulness of work-life benefits was positively associated with OCB: the more useful workers perceived work-life benefits to be for themselves and their families, the more likely they were to submit suggestions for improvement, to voluntarily attend quality methods meetings, and to report that they had assisted others with their job duties.

This evidence supports the notion that perceiving an organization as promoting a healthy and sustainable work-life balance fosters altruistic behaviours.

Hypothesis 2: Employees' perception of high level of work-life balance will have a positive effect on altruistic OCB.

### **2.1.3 Perceived supervisor support**

Supervisor support can be defined as the degree to which the supervisor values subordinates' contributions and cares about their well-being (Kottke & Sharafinski, 1988). A leading indicator of supervisor support is communication level, i.e., the accessibility of supervisors, and their propensity to keep employees informed about important issues and developments. Other important elements include the degree to which supervisors recognize and appreciate employees' effort and high-level work, involve them in decisions that affect their jobs and working environment, and treat them with consideration.

Growing evidence in the literature suggests that perceptions of being considered and cared for represent an important mechanism that predicts the extent to which employees are likely to become emotionally and psychologically engaged with their employing organization (Edwards, 2009). Leader supportiveness has been found to have a significant relation to various dimensions of organizational citizenship behaviour (Podsakoff, MacKenzie, Moorman, and Fetter, 1990). Supervisors represent to some extent a model for their subordinates, and thus influence their pro-social behaviour. Moreover, supervisors' supportiveness “initiates a pattern of exchange that is social and noncontractual in character” (Smith et al., 1983, p. 655). On the basis of the reciprocity norm, perceived supervisor support should create a felt obligation to care about the organization's welfare (Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades, 2001). The obligation to exchange caring for caring (Foa and Foa, 1980) should enhance employees' positive reactions towards the organization and such reciprocation has been found to predict employee in-role and business unit performance (Dysvik & Kuvaas, 2012). According to George and Brief (1992), this may cause employees to engage in extra-role activities such as aiding fellow employees, taking action to protect the organization from risk, offering constructive suggestions, and seeking knowledge and skills that are beneficial to the organization.

Based on this theoretical support, we expect that employees' experiences of positive feelings at work, induced by the caring and help of supervisors, should foster altruistic behaviours.

Hypothesis 3: Employees' perception of high supervisor support will have a positive effect on altruistic OCB.

### **2.2 Age as a moderator in the relationship between altruistic OCB and its predictors**

In the present study we rely on life span theoretical approaches to propose that antecedents to altruistic OCB may depend on age of the organizational member. According to these perspectives, changes people undergo during their lives affect the extent to which they attach value to different work outcomes and organizational benefits.

The lifespan approach based on the Selection Optimization Theory argues that employees' needs change with age and explains the strategies people use to adapt to age-related changes, as well as dynamic changes occurring in the workplace (Baltes, Staudinger, and Lindenberger, 1999). Recent research on adult development used lifespan approaches to propose that individuals' motives change over the course of their lives in terms of rank ordering, absolute levels, and motive strength (Inceoglu, Segers, and Bartram, 2012). Older employees perceive their future time as more limited than their younger colleagues do, and this induces them to place higher value on affective rewards and emotional intimacy than on extrinsic rewards. There is also evidence that organizational investments in training and development activities such as job mobility, career planning, mentoring and coaching have a weaker positive impact on older workers, compared with younger ones (Innocenti, Profili, and Sammarra, 2013).

Consistently with Kegan's (1982) theory of different stages of adult development, Wagner and Rush (2000) found some initial support to the hypothesis that differences in interpersonal orientations between younger and older adults may lead to different salient motives for altruistic OCB. Their results show that contextual-relevant attitudes such as job satisfaction, organizational commitment, and trust in management are strongly related to the expression of altruistic behaviours among younger adults, while the dispositional variables of moral judgment is a unique predictor of altruistic OCB among older adults.

A lifespan perspective is useful for examining the way age qualifies the relationship between altruistic behaviour and its antecedents because adults display these adaptive processes at work and therefore change the bases for choosing to engage in altruistic behaviour.

### **2.2.1 Age as moderator between fun at work and altruistic OCB**

Previous research suggests that individuals may have different views and attitudes towards workplace fun depending on personality characteristics and other factors, such as a person's work history, peer influences, and socialization experiences (Aldag & Sherony, 2001). Another individual dimension that may influence one's attitude towards fun at work is a person's life stage. Younger employees lack work-based experience and information, and may therefore base expectations regarding work life on their experiences in school environments, which may result in placing greater value on a fun work environment than their older colleagues do. An organization with a culture of camaraderie may better resemble the college atmosphere to which young adults transitioning from education to work life are most accustomed. This consideration has been incorporated by several successful companies that have adopted "play and fun" cultural programs, intended to attract and retain superior talent among young graduates in their human resources and marketing/recruitment strategies.

According to Belkin (2007), a majority of workers under the age of 30 consider working in a fun environment as an important factor in their job search. Despite the practical implications of this debate, systematic research on the relationship between age and fun at work has received little consideration. Some initial evidence was found in the literature examining generational differences in job attitudes (Benson & Brown, 2011; Twenge & Campbell, 2008). These studies often describe the Y generation as particularly sensitive to a fun work environment, and cast this attitudinal trait as one of the most distinctive aspects of this youngest generation of workers, when contrasted against the attitudes of Veterans, Baby Boomers, and Xers.

In line with this view, Lamm and Meeks (2009) found that a positive association between workplace fun and individual positive work outcomes was stronger in younger workers than in members of other generations. Based on these findings, the authors conclude that Generation Yers may regard fun in the workplace as a requirement, rather than a benefit.

While these initial findings seem to support the thesis that there may be differences across generations in attitudes towards fun at work, such differences may simply reflect an age factor in which different generations are at different stages of their lives and careers (Smola & Sutton, 2002). As a matter of fact, most empirical research on generational differences in work attitudes, including the Lamm and Meeks' study (2009), are based on cross-sectional data, making the disentanglement of age, cohort, and generational effects impossible (Parry & Urwin, 2011). Therefore, it is likely that the observed differences in attitude towards fun at work reflect individual age differences rather than generational traits per se. In light of this, we hypothesize the following:

Hypothesis 4: The association between fun at work and altruistic OCB will be stronger for younger employees in contrast to for older employees.

### **2.2.2 Age as moderator between work-life balance and altruistic OCB**

To date, most studies have examined work-life balance issues from a relatively static and unchanging perspective, failing to "adequately explore how they develop over the course of an employee's working life" (Darcy, McCarthy, Hill, and Grady, 2012, p. 111). Only a few studies have challenged this view and explored whether employees experience work-life balance differently depending on age. In one such study, Darcy and colleagues (2012) explored the antecedents of work-life balance, and found that they differ marginally across a sample of 729 employees in various career stages denoted by age. Recent research showed that the employees

most likely to indicate that workplace flexibility contributed to their success as an employee were those between the ages of 36 and 52 (Pitt-Catsouphes, Matz-Costa, and Besen, 2009).

Although these initial findings do not clearly indicate how employees assign different values to work-life benefits at different ages, several considerations suggest that appreciation of work-life benefits may increase for individuals as they progress through life stages. Most middle-aged workers have greater family care duties and responsibilities and are therefore likely to assign greater importance to work-life balance than their youngest colleagues do. Older adults are often involved in family care, as people between the ages of 50 and 75 often become grandparents and are likely to take on the care of young children, or may need to provide assistance to a spouse or partner. Another possible reason why older workers may place greater value on work-life balance is an increasing awareness that lifespan is finite and time may be running out for undertaking desired activities, such as travel or leisure pursuits.

Based on these considerations, we hypothesize that work-life balance may be a highly valued organizational condition for older employees, causing these workers to feel obligated to give back or reward the organization with higher altruistic behaviours. Therefore, we posit the following hypothesis:

Hypothesis 5: The association between work-life balance and altruistic OCB will be stronger for older employees in contrast to for younger employees.

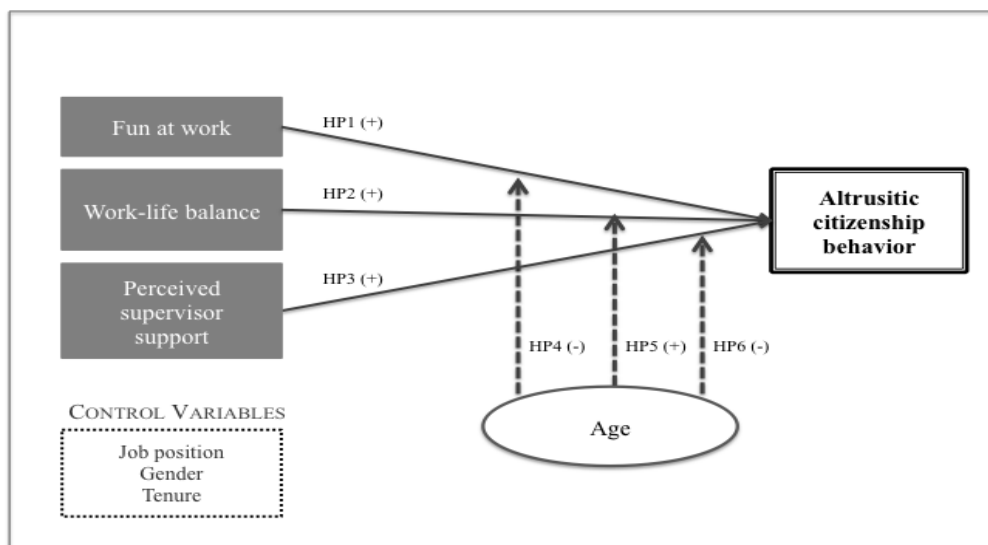
### 2.2.3 Age as moderator between perceived supervisor support and altruistic OCB

Although support at work is *per se* valuable, its material and symbolic utility may vary by group. In some cases, accepting support may suggest incompetence or a lack of ability or independence, and consequently be considered more of a threat to individual self-esteem than an opportunity (Peeters, Buunk, and Schaufeli, 1995). Personal and organizational conditions could therefore influence employees' reactions to supervisors' guidance and care. Previous research has started to shed light on possible moderators, such as gender, tenure, and job type, that could modify the relationship between supervisor support and employees' work attitudes (Ng & Sorensen, 2008). The value of supervisor support may also be influenced by age differences among workers. Older employees, who perceive their future time as more limited, and are more familiar with work processes, may therefore be less responsive to supervisor support in their work attitudes and behaviours, including OCB. On the other hand, younger employees who are in the early stage of life and career are more concerned about understanding their strengths and seeking to develop mastery in a certain area (Finegold, Mohrman, and Spreitzer, 2002). According to Bauer, Morrison, and Callister (1998), newcomers need more clarity with regard to role expectations and may benefit more from intense interactions with their managers. For these reasons, supervisor support may be more helpful for them in building a positive relationship with the organization, and more instrumental in developing altruistic behaviours.

Based on this consideration, we posit the following hypothesis:

Hypothesis 6: The association between perceived supervisor support and altruistic OCB will be stronger for younger employees in contrast to for older employees.

Figure 1 - Research model



### 3. METHODS

#### 3.1 Sample and procedure

The present study is based on secondary data provided by a global human resources consulting and research company from 37 Italian companies, both multinational and domestic, involving a total of 6,182 employees. The respondents represent diverse organizational settings across a wide range of industries. Included in the sample were 19% companies with fewer than 100 employees, 46% companies with 100 to 250 employees, and 35% with more than 250 employees. The employees represented different age classes: 40% were 34 or younger, 39% were between 35 and 44 years old, and 21% were over 45. Men made up 60% of the sample, reflecting the fact that several of the companies involved in the research operate in traditionally male-dominated sectors, such as manufacturing.

#### 3.2 Measures

To measure the constructs in the proposed model, all scale items were assessed on a five-point Likert scale ranging from 1 (almost always not true) to 5 (almost always true). As the items were extracted from the questionnaire adopted by a consulting and research company, care was taken to assess their content equivalence to established scales used in academic research. Content equivalence is important as it provides evidence about the construct validity of an assessment instrument (Ding and Hershberger, 2002). Typically, this process validation is based on judgment from content experts. According to Grant and Davis (1997), the selection of the panel members is very important, as they should exhibit relevant level of training, experience and qualification on the subject. A history of publications, presentations and academic assignments was used as criterion in selecting the four experts (Grant & Kinney, 1992) involved in the panel. All experts confirmed the correspondence between the scales adopted in our study and those currently used in academic research.

The means, standard deviations, correlations and alpha reliabilities (in the main diagonal) for all variables are presented in Table 1.

**Table 1 - Means, standard deviations, and correlations<sup>a</sup>**

	Mean	SD	1	2	3	4	5	6	7	8
1. Gender <sup>b</sup>				.044**	.135**	.143**	.039**	.068**	.075**	.085**
2. Tenure	2.80	1.29			.073**	.578**	.115**	.016	.088**	.014
3. Job position	1.31	.53				.130**	.162**	.111**	.161**	.175**
4. Age	1.81	.76					.038**	.067**	.001	.062**
5. Fun at work	3.90	.85					(.86)	.735**	.808**	.479**
6. WLB	3.77	.84						(.70)	.734**	.436**
7. PSS	3.82	.87							(.91)	.472**
8. Altruistic OCB	4.41	.58								(0.72)

<sup>a</sup> Employees n=6,182; Organizations n=37

<sup>b</sup>0=female; 1=male

#### 3.2.1 Dependent variable

Four items were adopted to measure altruistic OCB. Sample items include “I help others with their tasks, even though it is not required” and “I’m always ready to help my colleagues when they have a problem at work”. These items have strong similarity with those included in traditional validated scales. For example, Podsakoff and colleagues (1990) in their measure of altruistic OCB adopt the following items: “I help other who have heavy work loads” and “I willingly help other who have work related problems”. In the same way, Williams and Anderson (1991) present the following items: “I take a personal interest in other employees” and “I go out of the way to help new employees”.

### 3.2.2 Independent variables

*Work-life balance*: this variable was measured by adopting a three-item scale capturing the degree to which the organization provides work conditions that help employees maintain a balance between work and personal life. Sample items are: “People are encouraged to balance their work life and personal life” and “I’m able to take time off from work when I think it is necessary”. The items have proved to be very close in meaning with those adopted by other validated scales, such as Hill and colleagues (2001) “I have sufficient time away from my job to maintain adequate work and personal/family life balance”.

*Fun at work*: this variable was measured by adopting a four-item scale that captured the extent to which employees perceived their work environment to be enjoyable. Sample items include “This is a fun place to work” and “At my workplace, people celebrate special events”. These items have proved to be very close in meaning with those adopted by Karl and colleagues’ “(In my organization) departments or teams perform humorous skits and annual celebration” (2005), and “Employees (at my organization) seem to be having a lot of fun” (2010).

*Perceived supervisor support*: this variable was measured by adopting a six-item scale assessing employees’ perceptions of the degree to which supervisors valued their contributions and cared about them. Example items are: “My supervisor shows a sincere interest in me”, “My supervisor genuinely seeks and respond to my suggestions and ideas” and “My supervisor is approachable, easy to talk with”. These items are very similar to scale items used in previous academic research, such as Dysvik and Kuvaas (2012), Shanon and Eisenberger’s (2006) and Eisenberger and colleagues’ (2002) “My manager really cares about my well-being”, “My manager cares about my opinions”, and “Help is available from my manager when I have a problem”.

### 3.2.3 Moderator variable

Although a cut-off point between young and older workers is not set, in this study we use the often employed threshold of 45 years to compare older employees to younger or middle-aged workers (Warr, 2000; Inceoglu, Segers and Bartram, 2012). In particular, following Finegold, Mohrman and Spreitzer (2002) we categorized age into three groupings: “34 years or younger” (2,488 respondents), “between 35 and 44 years” (2,393 respondents), and “over 45 years” (1,301 respondents). The choice of grouping our sample in these three age cohorts is also coherent with the EU-practice of the statisticians to take the age of 45 years as the demarcation line between being a “younger” (24–44 years) and “older” (45–64 years) worker (Tikkanen, 2011).

Dummy variables were created for each age group. The moderator variables were then created by multiplying each age group by the independent variables (Baron & Kenny, 1986).

### 3.2.4 Control variables

A series of statistical controls were added in analyses to attenuate their confounding influence on results including: tenure (measured with a five-point scale from “less than two years” to “over 16 years”), gender (dummy coded 0=female; 1=male), job position (coded as “employee” (72%), “manager” (25%) and “top manager” (3%)).

## 4. Analyses

The dataset included information at two different levels, a first level of individuals, and a second level in which observations were grouped into 37 organizations. The purpose of the second level of analysis is to take into account the influence of organizational characteristics on altruistic OCB. We chose to test our hypotheses using a multilevel regression model because such models are more appropriate than standard regression methods (e.g., Generalised Linear Models) for analyzing complex data structures. A multilevel regression model can account for the hidden hierarchical structure of the data, and thereby avoid generating biased estimates and standard errors (Maas & Hox, 2004).

We employed a “mixed effects” linear model (Searle, Casella, and McCulloch, 1992) that allows data with a complex variance to be analysed through maximum likelihood estimation. We tested the model in four steps. First, we estimated a null model that had no predictors to partition altruistic OCB variance into within- and between-firms components. Second, we added the control variables (Model 1). Model 2 then included the explanatory variables, and Model 3 the moderator variables. The age variable was categorized into three groupings: the middle group and the older group were retained in the model, and the results were compared with the excluded younger group.

## 4. Results

The value of the likelihood-ratio test on second-level significance (organization) is 308,37 (p value<0,001). These results show that a second level exists, confirming that the use of a multilevel approach is suitable for describing the determinants of altruistic behaviour. We then ran a null model and a general model, to select the best specification for our data. The best model specification was detected by first adding the control variables to the null model, and then adding the other covariates.



The null model had an Interclass Correlation Coefficient (the ratio of between-organizations to total variance) of 0.06, suggesting that 6% of the variance in altruistic OCB arises between organizations. This value is statistically significant, suggesting – as expected - that altruism variance can be partially attributable to the specific organizational setting.

Tables 2 presents the results of our analysis.

**Table 2 - Multilevel analysis results**

Variables	Model 1		Model 2		Model 3	
	B	s.e.	$\beta$	s.e.	$\beta$	s.e.
<i>Moderator variables</i>						
Fun at WorkxAge2					-0.04	0.03
Fun at WorkxAge3					-0.14***	0.03
WLBxAge2					0.05**	0.02
WLBxAge3					0.09***	0.03
PSSxAge2					-0.01	0.02
PSSxAge3					0.04	0.03
<i>Independent variables</i>						
Fun at work			0.17***	0.01		
WLB			0.07***	0.01		
PSS			0.12***	0.01		
<i>Control variables</i>						
Gender	0.03*	0.01				
Manager	0.18***	0.01				
Top manager	0.33***	0.04				
Tenure	-0.01	0.00				
Age 2	0.01	0.02				
Age 3	0.11***	0.02				
Intercept	4.30***	0.03	2.89***	0.04	2.89***	0.05
$\sigma_v$	0.018		0.003		0.003	
$\sigma_\varepsilon$	0.306		0.243		0.242	
X <sup>2</sup> (df)	210.76 (6)		1969.82 (9)		1991.86 (15)	
ICC	0.06		0.01		0.01	

Model 1 examines the base model containing only the control variables. The results suggest that managers and top managers have higher levels of altruistic behaviours than other employees and that men exhibit slightly higher altruism than women.

With regard to age, older employees report higher levels of altruistic behaviours. This result is consistent with previous research suggesting that senior workers have more positive feelings towards their organizations because they tend to be better at emotional regulation (Bal, De Lange, Jansen, and Van Der Velde, 2008), and may believe their current employer will be their last (Carstensen, Isaacowitz, & Charles, 1999). Moreover, studies have confirmed that older people in general report less negative affectivity than younger people, according to the idea of “emotional selectivity” (Charles, Reynolds, and Gatz, 2001).

In Model 2, we included the independent variables. Hypotheses 1, 2, and 3 were confirmed: fun at work ( $\beta=0.17$ ;  $p<0.01$ ), work-life balance ( $\beta=0.07$ ;  $p<0.01$ ), and perceived supervisor support ( $\beta=0.12$ ;  $p<0.01$ ) each had a positive impact on altruistic OCB, and the coefficients were significant.

Finally, Model 3 included the moderation variable. We found that the association between altruistic behaviour and its antecedents was affected by age in the case of work-life balance, and even more so for fun at work, although not in the case of perceived supervisor support.

Specifically, results showed a stronger association between fun at work and increased altruistic OCB in the younger group (Age 1) than in the older group (Age 3). For the middle group, the coefficient was not significant. Therefore, results partially support hypothesis 4 that a fun work environment is more relevant for younger workers.

For work-life balance, we found a greater association with altruistic OCB for the middle group ( $\beta=0.05$ ;  $p<0.05$ ) and the older group ( $\beta=0.09$ ;  $p<0.001$ ) than the younger group, confirming hypothesis 5.

Contrary to our expectations, age did not moderate the relationship between perceived supervisor support and altruistic OCB (hypothesis 6). This result suggests that employees' perceptions of supervisors' support enhance extra-role behaviours regardless of age.

## **5. DISCUSSION**

### **5.1 Theoretical and managerial implications**

Providing a better understanding of altruistic behaviours' determinants is crucial if we accept the idea that "in a world that is so increasingly competitive, the organization that promotes and has the highest degree of altruistic behaviour demonstrated is likely to 'outcompete' its more selfish counterpart" (Clarkson, 2014, p. 265). Based on a sample of workers from 37 companies in Italy, the aim of this study was to extend theoretical and empirical understanding of the antecedents of altruistic OCB by examining two key issues. The first was to test the direct impact of supervisor support, fun at work and work-life balance on altruistic behaviours. The second was to determine whether the effects of these predictors were moderated by age. The results lead to a number of theoretical implications linked to the above aims. First, our findings provide support for the idea that work conditions that favour employees' positive mood and psychological well-being have a major influence on the extent to which they are likely to voluntarily help others to manage or prevent work-related problems. Our study not only confirms previous research (e.g. Podsakoff, MacKenzie, Paine, and Bachrach, 2000) on the key role played by supportive supervisors in determining altruistic OCBs; it also demonstrates the significance of perceived fun at work and work-life balance and that both are linked to altruistic OCB. This result is particularly relevant because it suggests a whole new category of antecedents that has seldom been considered in the literature. Indeed, to our knowledge, this is one of the few studies to test work-life balance and workplace fun as direct predictors of altruistic OCB, and we believe it confirms their relevance and merit for this area of research.

The second point concerns the link between altruistic OCB and employees' age. Our findings showed that younger employees exhibited lower levels of altruistic behaviours than those in other age groups. Consistent with generativity theory (McAdams & de St. Aubin, 1998) and previous findings (e.g., Kanfer & Ackerman, 2000), this result is in line with the argument that with both increased age and parenthood, individuals tend to assign greater value to assisting broader society, and become more inclined to cooperate than compete.

The third and most fundamental point concerns the importance distinct predictors of altruistic OCB may have for individuals at different points in their life. Given the finding that younger employees report lower levels of altruistic behaviours, it is worth noting that some of the factors that predict this dimension of OCB differ by age group. Interestingly, fun at work was found to be a significant predictor of altruistic behaviours for younger employees only, while work-life balance increased altruistic OCB for employees in both the middle and older age groups. Contrary to our expectation, we found that age did not moderate the relationship between perceived supervisor support and altruistic behaviours. Employees of all ages across the career span who perceived their supervisors to be supportive and concerned about their well-being were more likely to reciprocate with positive behaviours such as voluntarily helping co-workers. This result clearly emphasizes the key role supervisors play in promoting work behaviours that go above and beyond the call of duty. This in turn supports the importance assigned by both leader-member exchange theory and social exchange theory to the behaviours of supervisors in conveying the concern and appreciation of an organization for its employees (Podsakoff et al., 2000).

Taken together, these results showed that the main differences between age categories were between the younger age groups and the other two groups. This finding is particularly interesting as other researchers have argued that the first stage of a career - defined by age or psychological adjustment- differs most from the other stages because at the beginning of a career shared lack of work experience results in less variance in perceptions of work than in the more diverse groups in other stages (Ornstein, Cron, and Slocum, 1989).

Beyond its theoretical contributions, this study has a number of meaningful implications for managers. First, the key role of perceived supervisor support in fostering altruistic OCB suggests that if organisations want to increase cooperative behaviours among co-workers, they need to select and train managers who are able to build high-quality social exchange relationships with all subordinates, regardless of age. Supervisors should therefore avoid focusing predominantly on the needs of young workers, and instead engage equally in supporting more experienced subordinates, particularly employees in the late-career stage who are most often penalized by negative age stereotypes (Chiu, Chan, Snape, and Redman, 2001; Kunze, Boehm, and Bruch, 2011). Second, in designing work-life balance initiatives, organisations should pay special attention to the specific needs of mid-career and late-career employees, as they are more sensitive to these benefits than younger workers, and more likely to reciprocate with increased altruism. Third, based on our findings, managers should be aware that creating a pleasant working environment is an important means of enhancing psychological well-being of employees in the early-career stage. This result has relevant implications, as research has shown that

young workers are often the most difficult segment of the employee population to engage, motivate, and retain (James, McKechnie, and Swanberg, 2011; Ornstein et al, 1989;). Perhaps organisations need to rethink traditional working conditions and atmosphere to inspire commitment, loyalty, and extra-role behaviours from employees in the initial phase of their careers.

Taken together, our findings point to differences in the values assigned by employees at different points in their career to various aspects of the organisational context, implying that age is becoming an increasingly relevant dimension of diversity in the workplace.

## **5.2 Limitations**

Notwithstanding its theoretical and managerial implications, the current study has some limitations that need to be acknowledged and addressed in future studies. A first limitation of this study is that it is based on self-report data and thus might be subject to common-method bias. However, we may yet retain some confidence in our obtained interactions, as common-method variance cannot account for interactions in regression (McClelland & Judd, 1993). Another important limitation associated to self-report data is self-serving bias on the part of the respondents who wish to appear to be good citizens to self and others. However, several studies have also adopted self-ratings of OCB (e.g. Moorman & Blakely, 1995; William, Pitre, and Zainuba, 2002) as observers such as peers and superiors may observe only a portion of the individual OCB (Organ & Konovsky, 1989). A further limitation is that the cross-sectional design did not make it possible to test causality among the study variables.

In this paper we used chronological age as it is the most widely used index of age in research. However, we acknowledge that chronological age covaries with other variables such as health status (Kanfer & Ackerman, 2004), subjective age (Kooij, de Lange, Jansen, and Dikkers, 2013), and generational cohort (Twenge & Campbell, 2008), and that including some of these variables in the model would increase the comprehension of altruistic behaviour's antecedents.

Lastly, although the study used a relatively large sample of companies from different industries, the generalizability of its findings is limited because the data came from a single country, Italy. Future researchers may wish to test the model in different cultural settings to expand the generalizability of the results.

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