The virtuous cycle of prosocial behavior and perceived prosocial impact in organizations

ABSTRACT

This study aims to understand the relationship between prosocial behavior in organizations and perceived prosocial impact. Using data collected in three waves (N1=631, N2=240, and N3=148), we show that organizational citizenship behavior, a prosocial organizational behavior, and benevolence satisfaction, the perception that their work has a positive effect on others, mutually predict each other over time. As such, our research shows a virtuous cycle of prosociality between prosocial behavior at work and the perception of prosocial impact in the workplace. Theoretical and practical implications for people and organizations are discussed.

The virtuous cycle of prosocial behavior and perceived prosocial impact in organizations

Prosocial behavior refers, in general terms, to acting in the benefit of other people (Shroeder & Graziano, 2015). Literature on organizations have devoted great interest to the study of prosocial behavior, mainly since Organ and his colleagues (Organ, 1977; Smith, Organ, & Near, 1983) proposed the concept of organizational citizenship behavior. However, studying prosociality in organizations require not only to understand the behaviors of employees, but also their motivations for acting in a prosocial way and how they perceive the impact of their behavior on others (Bolino & Grant, 2016). Thus, during the past twenty years, researchers have payed increasing attention to prosocial motivation and, more recently, to prosocial impact (Bolino & Grant, 2016). Although the relationship between prosocial motivation and prosocial behavior is well documented, little is known about the relationship between prosocial behavior and prosocial impact.

Literature on OCB has been extensive, showing a relationship with important organizational and individual benefits for the employees that perform OCB (Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D., 2009), although it can also involve detrimental effects (Bolino et al., 2018). Due to the mainly beneficial effects of OCB, a wide range of studies have focused on understanding the antecedents of this behavior, initially following a social exchange perspective, but then incorporating a functional approach, where prosocial motives took a leading role. Some prosocial motives that promote OCB are prosocial values, organizational concern (Rioux & Penner, 2001), and a general prosocial motivation (Grant & Mayer, 2009). Research on consequences of OCB

have mainly studied effects on organizations and objective effects on the individual, such as performance evaluations and promotions (Podsakoff et al., 2009). However, subjective effects on the individual, such as the way the employee perceives her job or the impact that her work has on others has been very scarce (Yaakobi & Weisberg, 2020).

There is reason to believe that whereas OCB may lead to perceptions of prosocial impact, when employees are aware of the benefits of their behavior, perceptions of prosocial impact may also lead to OCB. Bolino and Grant (2016) specifically suggest that, over time, as employees acknowledge that their actions benefit others, their prosocial motives are strengthened leading to more prosocial behaviors, supporting the idea of a virtuous cycle, calling for further research. Next, we will develop the arguments for the two hypothesized relationships, one from OCB to perceived prosocial impact and the other one from perceived prosocial impact to OCB.

RELATIONSHIP BETWEEN OCB AND PROSOCIAL IMPACT

Martela and Ryan (2015) showed that when individuals perform prosocial actions, their perceptions of prosocial impact, measured as perceived beneficence, increase. These authors argue that the perception of prosocial impact leads to a satisfaction of the three needs posited by Self-Determination Theory (i.e. autonomy, competence, and relatedness; Deci & Ryan, 2000). Focusing specifically on OCB, Bolino, M. C., Harvey, J., & Bachrach, D. G (2012) followed a self-regulation approach to explain this relationship. These authors suggested that, regardless of the reason that led employees to perform OCB, they would be constantly evaluating the gap between their current performance and the

desired outcome. By conducting this self-evaluation process, employees perceive the impact of their behavior. Additionally, the previous assessment of the positive impact (by the self-evaluation process) could be reinforced by receiving external cues (i.e., feedback) about the performance. When a helper experiences this feedback (e.g. gratitude expression), he or she will know that the outcome of his or her behavior was valued by the beneficiary, enhancing the perception of prosocial impact (Lee, H. W., Bradburn, J., Johnson, R. E., Lin, S.-H., & Chang, C.-H., 2019). Thus, through different mechanisms, such as need satisfaction, a self-evaluation process, and/or an evaluation of the external cues received, we propose that OCB will increase perceptions of prosocial impact.

Hypothesis 1: The level of OCB will predict the subsequent perception of prosocial impact.

However, as mentioned previously, we believe that the relationship between these constructs exists in both directions. When employees are aware of the benefits that their actions have on others, their prosocial motives are strengthened and their subsequent prosocial behaviors increase (Lemoine, G. J., Parsons, C. K., & Kansara, S., 2015). One possible explanation for this relationship is that, when aware of their impact, people interpret their prosocial behavior as a signal of their prosocial identity, thus feeling more prone to continue performing those behaviors (Gneezy, A., Imas, A., Brown, A., Nelson, L. D., & Norton, M. I., 2012). Along these lines, Grant (2007) proposed that employee's motivation to make a prosocial difference emerges, at least in part, from perceptions of prosocial impact. Moreover, Grant & Dutton (2012) showed that people were more inclined to engage in and sustain prosocial behaviors when they reflected on the benefits they generated on others rather than when they reflected on the benefits they received.

Additionally, Grant (2008) showed that when employees were made aware of the positive impact they had through their jobs, they exerted more effort and increased performance. Thus, we propose that the employee's perceived prosocial impact will affect his or her engagement in OCB.

Hypothesis 2: The level of perceived prosocial impact will predict the subsequent level of OCB.

METHODS

Participants and Procedure

Data was collected on three different waves, with a three-month interval between them. Participants were contacted (online) as part of the Alumni database of a Chilean university. We followed APA guidelines and the study was approved by the Research Ethics Committee of the same university who provided the mailing list. Participants were always informed about the purpose of the survey and were invited to participate voluntarily and anonymously. They were also informed that they could leave the study at any time and that their responses were completely confidential. Participants received 2 kind reminders each week.

On the first wave, 631 participants, aged between 21 to 81 years old (Mean Age = 40.93; SD = 10.58), completed the survey (56.6% male). From those, on the second wave, 240 participants responded (60.4% male), aged between 24 to 82 years old (Mean Age = 43.8; SD = 11.31). Finally, on the third wave we gathered 148 responses (56.8% male), from participants aged between 24 to 82 years old (Mean Age = 44.87; SD = 11.9). Thus, 148

participants responded all three waves. According to the ranges identified in Wolf,

Harrington, Clark & Miller (2013) for SEM models, we consider our sample size and

power appropriate. In terms of attrition, we found non-significant differences between

participants that only completed T1 ($N = 483$) versus those who answered all waves ($N =$

148) regarding gender ($[\chi 2(1)] = .03$, $p = .96$), OCB (t [629] = 1.24, $p = .214$), and

benevolence (t [286.9] = 1.95, $p = .052$). Participants only differed in age (t [213.08] =

4.24, $p < 0.001$). Thus, we consider attrition not problematic. Importantly, Little's MCAR

Test (Little, 1988) showed that missing data was completely at random ($[\chi^2(68)] = 49.86$, p

= .952]), which allowed us to use full maximum likelihood estimation (FIML).

Measures

In this research we study the relationship between perceived prosocial impact and OCB in a

longitudinal cross-lagged panel model. All our constructs are estimated through highly

validated scales.

Perceived prosocial impact was measured using the scale developed by Martela & Ryan

(2015) to measure benevolence need satisfaction, which was composed by four items. We

adapted the scale to the work context (e. g., "Through my work, I have been able to

improve the well-being of other people"). Participants rated the statements on a 7-point

Likert-type scale ranging from 1 (not at all true) to 7 (very true). This scale was translated

into Spanish using standard back-translation procedure (Brislin, 1970). Cronbach's α

coefficients were .92 on T1, .89 on T2, and .90 on T3. In order to build perceived prosocial

impact as a latent variable, we constructed four parcels based on the four different items of the scale.

Organizational citizenship behavior was measured using the 16-item scale developed by Lee & Allen (2002) that considers both behaviors targeted toward individuals and behaviors targeted toward the organization. Participants answered on a 7-point scale from 0 (never) to seven (always) how often they behave in several ways. Sample items are "Help others who have been absent" and "Attend functions that are not required but that help the organizational image". This scale had been previously used in Spanish in Chile (Espejo, 2011), so we used this previous translation. Cronbach's α coefficients were .92 on T1, .90 on T2, and .94 on T3. In order to build OCB as a latent variable, we created three parcels in which the 16 items from the scale were adequately combined.

RESULTS

Analytic Strategy

We used structural equation modelling to test our hypothesis. We designed a 3-wave cross-lagged panel model, on which our core variables were the need of benevolence and OCB (both variables measured in T1, T2 and T3). We used MPLUS 8.0 (Muthén & Muthén, 2017) to estimate the lagged paths from each of the constructs to all the others (to itself included) in three successive time points. Thus, all latent constructs were represented as potential causes and consequences of each other (while controlling by stability effects). We also allowed all the measures to covary between them while controlling by age and gender. Finally, based on the suggestion of Jöreskog (1979), we incorporated autocorrelated error

terms for the observed indicators. We chose to use a cross-lagged panel model methodology because it helps testing prospective directionality between variables over time. Although we are only trying to assess prospective direction (not testing causality directly), prospective significance between variables is a key requirement for posterior tests of causality (Selig & Little, 2012).

Invariance test. We analyzed the fit indices of our models based on the suggestions of Hu & Bentler (1999). First, we tested a model in which we constrained all the loading of both factors, perceived prosocial impact and OCB, while we let these latent variables to covary freely between them. This model had an acceptable fit, $\chi 2(205) = 480.01$; $p < .001$; RMSEA =.046; CFI = .961. Then, we compared this model with a baseline model in which no restrictions were imposed (nor to loading neither to paths). The model fit was also acceptable, $\chi 2(195) = 470.05$; $p < .001$; RMSEA = .047; CFI = .961. We then compared both models and, as the reduction of CFI values was less than .01 ($\Delta CFI = .000$), we considered that the assumption of invariance could be sustained (Cheung & Rensvold, 2002). As such, we conclude that the pattern of invariance could be sustained across waves for both, perceived prosocial impact and OCB. Hence, we kept the constrains in our final structural model. Fit indices of our final model were adequate ($\chi 2(209) = 483.75$; $p < .001$; RMSEA =.046; CFI = .961).

Longitudinal Analysis

All the descriptive data and intercorrelations between the variables are shown in Table 1.

Standardized loadings and paths are reported in Figure 1. We found a stable model as all constructs were predicted by themselves. As such, our results show that OCB is a

significant and positive prospective predictor of perceived prosocial impact ($\beta = .09$, [95% CI .01,.17], $p < 0.05$), providing support to our first hypothesis. In addition, perceived prosocial impact is a significant and positive prospective predictor of OCB ($\beta = .24$, [95% CI .14, .34], $p < 0.01$), providing evidence to support our second hypothesis.

DISCUSSION

In this research, we studied the bi-directional relationship between OCB (a prosocial behavior) and benevolence (perception of prosocial impact) in the workplace. Results supported that OCB and benevolence are positively and longitudinally linked to each other in a virtuous cycle of prosociality as intuited by Bolino & Grant (2016). In other words, when performing OCB, workers feel that their actions have a positive impact on somebody else, which in turn motivate employees to keep engaging in more prosocial behaviors. Theoretical and practical implications emerge from our paper.

This research contributes to the understanding of the almost unexplored third wheel of prosociality in organizations. Although prosocial behavior and prosocial motivation have been widely studied, there is very little research on prosocal impact and, in particular, on how perceptions of prosocial impact relate to prosocial behavior. This study specifically addresses this relationship in a work context, showing that both constructs reinforce each other. In this way, employees, by performing prosocial behaviors such as OCB, satisfy an internal need to have a positive impact on others. This satisfaction, then, motivates them to continue performing prosocial behaviors, carrying the virtuous cycle.

This research also contributes by analyzing these phenomena in a longitudinal way in a sample of working population. By looking at prosociality in organizations in three different waves, we can understand better how these distinct aspects of prosociality affect one another through time. A traditional cross-sectional design would not have allowed us to assess the bidirectional link between the constructs. Even though we cannot assess direct causality, but only prospective direction, this is an important first step for the understanding of the complex relationship between these constructs.

This research also has several practical contributions for managers and organizations. Our results show that, in order to promote OCB, managers and companies may focus on workers' prosocial impact. For example, by showing the benefits that other workers or stakeholders obtain as a result of the employee's OCB. To achieve this, a first requirement is to design jobs high on task significance in order to have a positive impact on people outside the organization (i.e. clients) as well as on people inside the organization (i.e., colleagues, supervisors). Unfortunately, having a positive impact is not the same as perceiving the positive impact. So, a second requirement to foster OCB is helping employees be aware of the impact they have. For example, Grant (2007) proposed four features of jobs that would facilitate the perception of prosocial impact: major *magnitude* (a long-lasting positive effect on the beneficiaries), broader *scope* (expose employees to a broader number of people), a major *frequency* (more opportunities to have a positive effect) and that are prone to *prevent harm.* Organizations could also foster benevolence by exposing employees to receive positive feedback from their own peers, which is seen genuine (Grant & Hofmann, 2011; Lemoine, G. J., Parsons, C. K., & Kansara, S., 2015), and encouraging In addition, receiving a gratitude expression (McCullough, M. E.,

Emmons, R. A., Kilpatrick, S. D., & Larson, D. B., 2001) may help workers see that their behaviors were valued by the beneficiary of the impact. Thus, gratitude programs can also be stablished formally.

Like every other research, we need to acknowledge some limitations. First, we only studied Chilean workers. Thus, the generalization of our results should be taken with caution. Second, OCB was measured using only self-reports. Further research should use different rating sources (Podsakoff, P. M., Mackenzie, S. B., Lee, J., & Podsakoff, N. P, 2003). Third, despite our longitudinal design, we can only speak about prospective directions. Causality may not be implied from this design. Fortunately, our CLPM is a key requirement to stablish cause-effects patters and significantly strengthen the study of the link between OCB and benevolence.

Literature has shown that OCB can also be related to negative outcomes (Bolino et al., 2018). Therefore, future research needs to address if this apparently virtuous cycle between OCB and benevolence (perceived prosocial impact) has any negative effects, such as reducing in-role behaviors or increasing emotional exhaustion. Additionally, we have only studied tis phenomena across three waves for six months. It is still unknown if this positive relationship holds for additional periods of time or, if this link between perceived impact and behaviors loses importance in longer periods of time.

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Table 1

Descriptives and inter-correlations between all variables (longitudinal data)

	M	SD	1	2	3	4	5	6	7	8
1. Gender (% Male)	56.6	.50								
2. Age	40.93	10.58	-.18**							
3. Benevolence T1	5.67	1.43	-.06	.29**						
4. Benevolence T2	5.74	1.32	.01	.30**	.77**					
5. Benevolence T3	5.89	1.29	-.14	.34**	.64**	.73**				
6. OCB T1	5.84	1.02	-.01	.20**	.52**	.44**	.50**			
7. OCB T2	5.91	.91	.02	.30**	.50**	.57**	.51**	.63**		
8. OCB T3	5.92	1.08	-.03	.20*	.39**	.54**	.63**	.56**	.68**	

Note. $*p < .05$; $**p < .01$; OCB = Organizational Citizenship Behavior

Figure 1

Results of the analysis of the relationship between OCB (prosocial behavior) and benevolence (perceived prosocial impact)
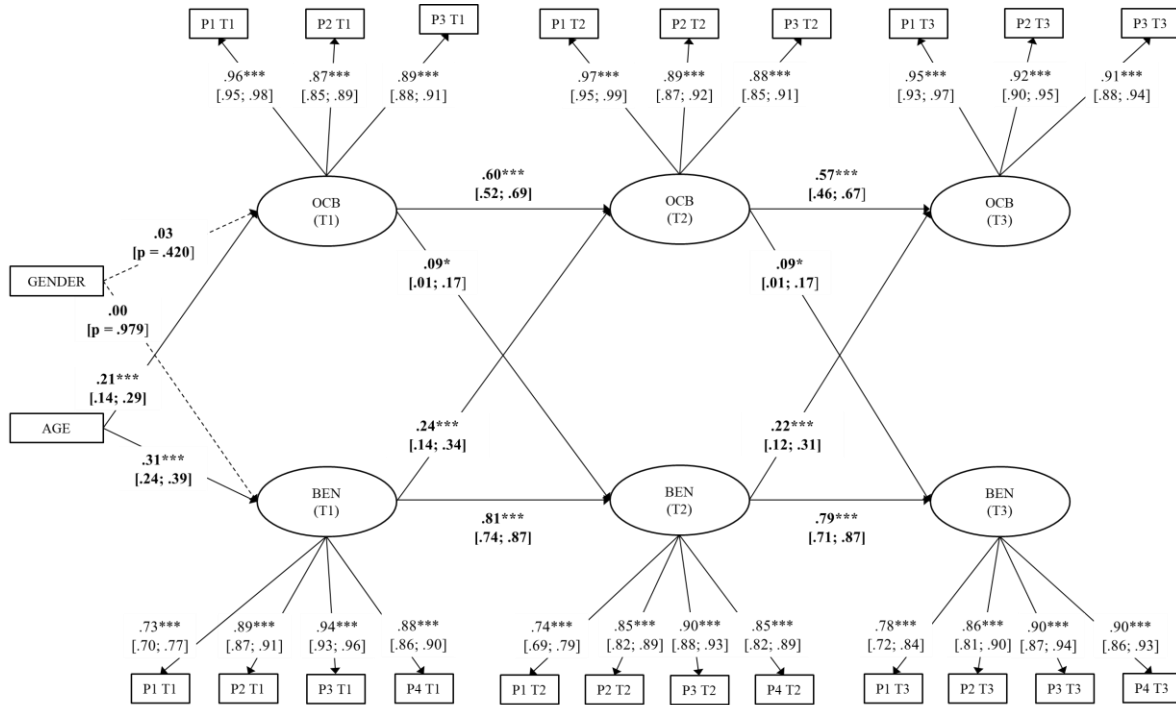
$\chi^2(209) = 483.75$, p < .001; CFI = .961; RMSEA = .046

Figure 1: Structural longitudinal model between variables of benevolence at work and organizational citizenship behavior. The coefficient shown of paths and loading are standardized values. OCB = Organizational citizenship behavior; BEN = Benevolence. T1: Time 1; T2: Time 2; T3: Time 3. To enhance visual simplicity error terms and covariances between variables are not shown in the scheme.
*p < .05; **p < .01; ***p < .001