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# **Prosociality as a mediator between teacher collaboration and turnover intention**

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## **Introduction**

Recently, teacher collaboration has attracted the attention of researchers for its potential to improve educational organisational effectiveness (Goddard et al., 2007). Meanwhile, a high rate of teacher turnover is not only a problem for work force and resource planning but also an indicator of the poor quality of schools (Vagi et al., 2019; Smethem, 2007). Acting on the assumption that collaborative practices enhance teachers' commitment to teaching at their school, researchers have shown considerable interest in the relationships between collaborative practices in schools and their effect on turnover intention, as an indicator of organisational effectiveness (e.g. Kraft et al., 2016; Smith and Ingersoll, 2004). However, despite these findings (Guin, 2004; Simon and Johnson, 2015), little is known about the process by which those effects are realised.

Organisational researchers have indicated that prosociality, which involves people caring about creating a positive difference in other's lives, enhances individual and organisational effectiveness (Batson, 2012; Grant, 2007). Grant's (2007) elaborate theoretical framework suggests that relational job architecture – composed of interaction, cooperation and collaboration – enhances workers' motivation to make a prosocial difference through prosocial impact on the

beneficiaries of their work, thereby leading to job persistence, which represents employee commitment to work. In educational organisations, teachers help and benefit others. While students are the end beneficiaries of collaborative educational endeavours, teacher colleagues also benefit from them (Tschannen-Moran, 2001; Victorino et al., 2018).

However, many educational researchers have not explicitly defined the term *prosocial*. They have studied prosocial elements by using other-oriented concepts, such as caring, empathy, organisational citizenship behaviour and servant leadership (e.g. Goroshit and Hen, 2016; Somech, 2016). This is because, first, being prosocial is a context-specific expression in public and service institutions and especially in educational organisations (Bright, 2008; Grant and Campbell, 2007). Second, educational organisations fundamentally require a relational job architecture, such as collaboration (Hallinger and Heck, 2010). Yet, although previous studies suggest that prosociality is relevant to collaboration (Hu and Liden, 2015; Tschannen-Moran, 2001; Victorino et al., 2018), teacher collaboration mitigates teacher turnover intention (Simon and Johnson, 2015), and prosociality eases teachers' stress (Eldor and Shoshani, 2016), little is known about prosociality itself and the potential role it plays in the linkage between teacher collaboration and their turnover intentions. Therefore, the purpose of this study is to investigate the mediating role of prosociality in the relationship between teacher collaboration and their turnover intention, with the help of the Job Impact Framework (Grant, 2007).

## **Literature background**

### ***Collaboration in school as relational job architecture***

Studies indicate that collaboration in school has a considerable job impact on organisational members and offers plenty of opportunities to make a difference (e.g. Brouwer et al., 2012;

Slater, 2005). This is because a successful collaboration requires synergistic, dynamical and shared performance of teachers and other co-workers in order to achieve collective goals (Jäppinen and Ciussi, 2016).

Teacher collaboration embodies relational job architecture in that it provides opportunities to benefit others (e.g. Eldor and Shoshani, 2016; Tschannen-Moran, 2001). Relational job architecture consists of job impact on beneficiaries and contact with beneficiaries in a relational structure (Grant, 2007). Regarding job impact, individuals become aware that their efforts can have a substantial impact on the beneficiaries when encountering a job opportunity that benefits others (Grant, 2007). For example, participative decision making at the school level is a form of collaboration (Bogler and Somech, 2005) that influences students and other educational staff. Through contact with beneficiaries, individuals learn about how their work affects these beneficiaries. For example, teachers' collaboration involves contacts with beneficiaries through creating time and spaces, and developing open-mindedness that facilitate discussions between colleagues, offering physical and human resources (Jäppinen et al. 2015; Hord and Sommers, 2008). Hence, collaboration in teaching jobs typically involves enriched relational architectures in which teachers have enormous impacts on others' lives.

### ***Prosocial impact***

Prosocial impact refers to the experience of recognising one's work as significant and purposeful because of its links to the welfare of others or the perception of making a positive difference in the lives of others (Grant, 2007). This is important for sense-making and well-being, as prosocial impact pertains to the meaning that people attach to their behaviours in the social world and the lens through which employees process, appraise and make sense of their experiences (Grant and Campbell, 2007).

Teachers perceive that their work is meaningful and makes a difference (Guramatunhu-Mudiwa and Scherz, 2013; Shapira-Lishchinsky and Tsemach, 2014). Since teachers interact, help and collaborate with others in an educational organisation (Slater, 2005; Tschannen-Moran, 2001), teaching provides opportunities to benefit others and to influence their welfare. Therefore, teachers can perceive prosocial impact.

### ***The relationship between collaboration and prosocial impact***

Teachers engaged in collaborative efforts are likely to perceive prosocial impact because they feel valued when their contributions towards benefitting others are successful (Crowther et al., 2009; Guramatunhu-Mudiwa and Scherz, 2013). For example, helping colleagues by using their knowledge and expertise makes teachers feel that their work is meaningful (e.g. Shapira-Lishchinsky and Rosenblatt, 2010). Thus, we expect that perceived prosocial impact increases when teachers recognise that they are collaborating for their beneficiaries (Shapira-Lishchinsky & Tsemach, 2014).

*Hypothesis 1 (H1 in Figure 1):* Perception of collaboration in school will be positively related to perceived prosocial impact.

### ***Prosocial motivation***

Prosocial motivation is an allocentric psychological state or a desire to benefit others (Batson, 1987; Grant, 2007). If one is highly prosocially motivated, one's attention is oriented towards the thoughts, feelings, preferences and welfare of other people in the interest of benefitting their lives (Hu and Liden, 2015).

Educational leaders' and teachers' prosocial motivation has been mostly studied from the point of view of helping others. Prosocial motivation has been conceptualised as empathy (e.g.

Goroshit and Hen, 2016), caring (e.g. Noddings, 2006) and servant leadership (e.g. Taylor et al., 2007), which are deeply related to educational organisational phenomena such as collaboration. Thus, other-oriented motivation is considered an essential component of effective schools (DiPaola and Tschannen-Moran, 2001).

Prosocial motivation may operate at three hierarchical levels: global, contextual, and situational (Grant and Berg, 2011). Regarding the global level, teachers' helping behaviours stem from other-oriented values and their willingness to go beyond the formal requirements of their positions such as caring and altruism (e.g. Cerit, 2009; Noddings, 2006). At the contextual level, teachers are expected to be passionate about educating students (Grant and Campbell, 2007) and collaborate with their colleagues and principals for the achievements of the students (Goddard et al., 2007; Hargreaves, 1994). As for the situational level, teachers may want to help their co-workers in particular relationships such as mentoring and induction (Ingersoll and Strong, 2011).

### ***The relationship between prosocial impact and prosocial motivation***

The perception of high prosocial impact promotes perceived prosocial motivation (e.g. Bellé, 2013; Sonnentag and Grant, 2012). Grant (2007, p. 403) explains this mechanism that perceived impact signifies the behaviour-outcome contingency that promotes motivation. When people perceive that their actions are benefitting others, they are motivated to engage in making a difference for others. On the other hand, when people feel their work does not have an impact, they tend not to aim for the outcome of making a prosocial difference, because they feel they have less opportunity to achieve this outcome (Grant, 2007). Therefore, in school settings, we believe that the perceived prosocial impact of benefiting others is likely to promote teachers' prosocial motivation.

*Hypothesis 2 (H2 in Figure 1):* Perceived prosocial impact will be positively related to perceived prosocial motivation.

### ***Turnover intention***

Previous studies suggest that withdrawal behaviour of teachers result in decreased school effectiveness (Rosenblatt et al., 2010; Shapira-Lishchinsky, 2012). Turnover is a type of withdrawal behaviour, akin to behaviours such as lateness and absenteeism, observed when an employee's job performance deteriorates (Kaplan et al., 2009). Turnover intention is a conscious and deliberate contemplation to leave an organisation (Tett and Meyer, 1993), and it has been studied as a proxy for actual voluntary turnover (Lambert and Hogan, 2009). Even though the intention to turnover may not materialise in actual voluntary turnover, it is important to examine the turnover intention for improving our understanding of the psychological process of withdrawal of employees (Lachman and Diamant, 1987).

Teachers leave their jobs for a number of reasons. Ingersoll (2001) described teachers' turnover by using concepts of movers and leavers. *Movers* switch to teaching jobs in other schools, and *leavers* leave the teaching occupation for good. Teaching is recognised as a human service occupation with chronic exposure to emotionally intense work (Grant and Campbell, 2007). Sometimes, this exposure leads to interpersonal stress, which is a great risk for leaving the profession (Ingersoll, 2001).

### ***The relationship between prosocial motivation and turnover intention, and prosociality as a mediator***

Prosocial motivation is closely linked to turnover intention. According to the framework by Grant (2007), people who experience prosocial motivation are energised to work harder and

longer. From a motivational perspective, when people's actions benefit others, they are likely to feel that they matter and experience a meaningfulness that energises them (Grant, 2007). Also empirical findings have shown that employees with high prosocial motivation do not leave their jobs as easily as employees with low prosocial motivation (Hu and Liden, 2015). Therefore, we hypothesise that high prosocial motivation reduces turnover intentions of teachers in schools (Grant, 2007).

*Hypothesis 3 (H3 in Figure 1):* Perceived prosocial motivation will be negatively related to turnover intention.

Previous studies suggest that teachers have less turnover intention in climates with great regard for interpersonal relationships and collective process (Shapira-Lishchinsky, 2009; Shapira-Lishchinsky and Rosenblatt, 2009). In addition, existing research shows that collaborative structures or environments in schools may directly affect teacher turnover (Kraft et al., 2016; Simon and Johnson, 2015; Smith and Ingersoll, 2004). Therefore, we assume that prosocial impact and prosocial motivation partially mediate the relationship between perception of collaboration and turnover intention.

*Hypothesis 4 (H4 in Figure 1):* Prosocial impact and prosocial motivation will mediate the relationship between perception of collaboration in school and turnover intention. However, only partial mediation is expected as a direct negative association between collaboration and turnover intention may also emerge.

## **Research aims**

This study examines how teachers' perception of collaboration, prosocial impact, prosocial motivation and turnover intention are related (Figure 1). It is motivated by the following research questions: (1) How is the perception of collaboration related to prosocial impact? (2) How is

prosocial impact related to prosocial motivation? (3) How is prosocial motivation related to turnover intention? (4) Do prosocial impact and prosocial motivation partially mediate the relationship between perception of collaboration and turnover intention?

[Figure 1 near here]

## **Method**

### ***Ethical considerations***

Our study followed the official Finnish guidelines on Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland (Finnish Advisory Board on Research Integrity, 2012), which correspond to the ethical guidelines of Japanese research institutions (Science Council of Japan, 2013). Before the survey, we explained the purpose of the study to the participants and assured them of complete confidentiality and anonymity.

Participation was voluntary.

### ***Participants and procedure***

This study was conducted in 2017 in Himeji city, located in western Japan. Teachers from elementary and junior high schools were invited to the study. In 2017, there were 29,276 school teachers in the selected locations (Himeji City Administration, 2017). A convenience sampling was used to select the participants. We first sought permission to administer the survey from the concerned authorities. Most of the contacted persons were known to us. After obtaining the permissions, one of the researchers visited each school in the prefecture and gave the principals a set of paper-and-pencil questionnaires along with self-addressed and stamped envelopes.

The final sample consisted of 260 professional educators: 150 teachers from elementary schools (57.7%) and 110 teachers from junior high schools (42.3%). They held different positions: 233 teachers (89.6%), 7 principals (2.7%), 8 vice-principals (3.1%) and 12 heads of department (4.6%). Teachers included classroom teachers, subject teachers and special education teachers, with either full-time or part-time contracts. The mean age of the educators was 39.88 years ( $SD = 11.51$ ), the mean tenure was 15.09 years ( $SD = 11.28$ ) and 39.2% of the educators were male. Most (96.9%) of the educators held more than a bachelor's degree. The sample composition is broadly representative of the teacher-population in the Japanese educational context (Ministry of Education Culture Sport Science and Technology Japan, 2016).

The questionnaire was originally developed in English, and translated into Japanese by the first author, who is fluent in both Japanese and English. Then, the translated instrument was checked by a native Japanese researcher studying education. Finally, a licensed guide interpreter, who had taught English in Japanese high schools proofread the final version of the instrument and made corrections.

### ***Instruments***

#### *Collaboration*

Collaboration was measured by four items, which were developed by one of the authors on the basis of previous research (Jäppinen and Ciussi 2016; Jäppinen et al. 2015). The items were preceded by the following leading sentence: 'When working together, I feel that...'. The items were: 'everyone's contribution is considered (CL1)', 'we create meaningful measures and practices (CL2)', 'we are able to change our individual opinions as new perspectives arise (CL3)', and 'it results in new ideas and alternative solutions (CL4)' ( $\alpha = .76$ ). For each item,

educators were asked to mark a position that best described their opinion on a visual analogue scale ranging from 0 to 50 (Dillman et al., 2014).

### *Prosocial impact*

Prosocial impact was measured with three items adapted from Grant (2008a): ‘I am very conscious of the positive impact that my work has on others (PI1)’, ‘I am very aware of the ways in which my work is benefitting others (PI2)’, and ‘I feel that I can have a positive impact on others through my work (PI3)’ ( $\alpha = .88$ ). The items were measured on a 7-point Likert-type scale anchored at 1 disagree strongly and at 7 agree strongly.

### *Prosocial motivation*

Prosocial motivation was measured with four items adapted from Grant (2008b). Educators responded the question, ‘Why are you motivated to do the work as a teacher?’ by rating the following options: ‘Because I care about benefitting others through my work (PM1)’, ‘Because I want to help others through my work (PM2)’, ‘Because I want to have a positive impact on others (PM3)’, and ‘Because it is important to me to do good for others through my work (PM4)’ ( $\alpha = .89$ ). The response scale was a 7-point Likert-type scale anchored at 1 disagree strongly and 7 agree strongly.

### *Turnover intention*

Turnover intention was measured with three items adapted from Camman et al. (1979): ‘I will probably look for a new job in near future (TI1)’, ‘If I may choose again, I will choose to work for this school (TI2) (score reversed)’ and ‘I often think about quitting (TI3)’ ( $\alpha = .66$ ). The items were measured on a 7-point Likert-type scale anchored at 1 disagree strongly and 7 agree

strongly.

### ***Analysis***

The associations between collaboration, prosocial impact, prosocial motivation and turnover intention (Figure 1) were examined via Structural equation modelling (SEM) implemented in Mplus, 7.0 (Muthén and Muthén, 2012). The few missing values (covariance coverage 99.9–100.0%) were assumed to be missing at random, and, since the data were not normally distributed, the robust maximum likelihood estimator (MLR) was used. The Full-Information-Maximum-Likelihood (FIML) procedure was used to account for the missing data. FIML uses all available data without imputing the missing values. To evaluate the goodness-of-fit of the hypothesised SEM model,  $\chi^2$  value, comparative fit index (CFI), Tucker Lewis index (TLI), standardised root-mean-square residual (SRMR) and root-mean-square error of approximation (RMSEA) were estimated (Hooper et al., 2008). A good model fit yields an insignificant  $p$ -value associated with a  $\chi^2$  value. Values lower than .07 for RMSEA, greater than .95 for CFI, and lower than .08 for SRMR were considered to indicate a good fit (Hooper et al., 2008; Hu and Bentler, 1999; Kline, 2016).

The mediating effects of prosocial impact and prosocial motivation were examined by the bootstrapping approach, using Mplus, with 2,000 iterations to calculate bias- corrected 95% confidence intervals (CI) to estimate indirect effects (Preacher and Hayes, 2004).

### **Results**

The descriptive statistics for the observed variables and their correlations are shown in Table 1.

[Table 1 near here]

We examined the preliminary measurement model in which the relationships between collaboration and prosocial impact, prosocial impact and prosocial motivation, prosocial motivation and turnover intention, and collaboration and turnover intention were correlated using confirmatory factor analysis (CFA). This model exhibited a moderately poor fit to the data ( $\chi^2(71) = 152.56, p < .001, RMSEA = .07, CFI = .93, TLI = .91, SRMR = .06$ ). Consequently, the model was modified according to the information given by the modification indices (MIs). The MIs revealed covariance between the errors of the items PM1 and PM2 for prosocial motivation (MI = 21.47) and the errors of the items TI1 and TI3 for turnover intention (MI = 14.07). After adding them, the model showed satisfactory approximation with the data ( $\chi^2(69) = 122.08, p < .001, RMSEA = .05, CFI = .95, TLI = .94, SRMR = .05$ ).

Next, we applied SEM to assess the hypothesised path model between collaboration, prosocial impact, prosocial motivation and turnover intention. This hypothesised model did not fit the data well ( $\chi^2(72) = 138.15, p < .001, RMSEA = .06, CFI = .94, TLI = .93, SRMR = .07$ ). However, the MIs indicated that a path between collaboration and turnover intention (MI = 12.10) should be added. We modified the model accordingly. This model fit the data reasonably well ( $\chi^2(70) = 130.10, p < .001, RMSEA = .06, CFI = .95, TLI = .93, SRMR = .06$ ). In this final model (Figure 2), stronger collaboration was related to higher prosocial impact, which, in turn, was associated with higher prosocial motivation, supporting Hypotheses 1 and 2. Finally, in support of Hypothesis 3, prosocial motivation was negatively related to turnover intention: the higher the prosocial motivation teachers had, the less they reported turnover intentions.

[Figure 2 near here]

The mediating effects of collaboration on turnover intention ( $\beta = -.09$ , bias-corrected 95% CI = [-.15, -.02], excluding zero) via prosocial impact and prosocial motivation were found

to be statistically significant. Thus, in support of Hypothesis 4, prosocial impact and prosocial motivation partially mediated the relationship between collaboration and prosocial motivation.

## **Discussion**

This study examined the potential mediating role of prosociality between collaboration and turnover intention based on the framework by Grant (2007) in an educational context. Our results confirmed this linkage. That is, teachers engaged in a collaborative job structure felt that the positive impact of their work influences the well-being of others, thereby leading to the willingness to help others more (Grant, 2007; Hallinger and Heck, 2010). Moreover, collaboration at the school level, which provides teachers with the opportunities to interact, limited their turnover intention through the experience and motivation to help others (Guin, 2004; Simon and Johnson, 2015).

As hypothesised (Grant, 2007), teachers experienced high prosocial impact when they made a positive difference in others' lives through collaboration. In a collaborative environment, teachers share responsibilities and learn together to achieve school goals, thereby helping and benefitting others (Jäppinen et al. 2015). Their frequent interaction and collective decision-making towards school goals generate the experience that they are working for others' benefit, which ultimately leads to the welfare of the students. Since teacher collaboration has a helpful connotation, teachers perceive collaboration as a relational job that generates prosocial impact.

Since Grant (2007) proposed a relationship between prosocial impact and prosocial motivation, few studies have investigated it. This study showed that the more prosocial impact the teachers perceive, the more prosocial motivation they have. One possible explanation is that the affective benefit of prosocial impact comes later (Sonnentag and Grant, 2012). For example, people may feel prosocial impact at the end of the school day but not immediately at the end of

the work. Prosocial impact boosts activated positive emotions such as excitement and inspiration by encouraging people to reflect on work (Sonnentag and Grant, 2012). Additionally, it enhances deactivated positive emotions such as calm and relaxation by enabling people to feel more competent. Thus, teachers who have helped others in their school recollect their contributions or the appreciation they have received for their work. The positive feedback energises them to help others more.

Echoing the previous studies (e.g. Kraft et al., 2016; Simon and Johnson, 2015; Smith and Ingersoll, 2004), we found a direct negative relationship between collaboration and turnover intention. This suggests that the association between collaboration and turnover intention was not fully mediated by prosociality; in fact, prosociality only partially explained why strong collaboration was linked to fewer intentions to leave the job. For example, a cooperative and supportive work environment is effective in preventing an organisation from losing its members (Hu and Liden, 2015). Support from colleagues is especially important for teachers' well-being (Smith and Ingersoll, 2004). It may also be that collaboration is an active process that requires engagement to achieve shared goals (Hu and Liden, 2015). This in turn may enhance the perceptions of a group's ability to achieve collective goals such as collective efficacy (Bandura, 1997). Such shared competency has been found to alleviate turnover intention (e.g. You and Conley, 2015).

Previously, prosociality has mostly been examined in relation to short-term tasks (Grant, 2008b). Our study shed light on the effects of prosociality from a new point of view: turnover intention or employees thoughts about quitting their long-term employment. This is an important contribution for two reasons. First, the use of long-term, instead of short-term, employment is more appropriate when considering the outcome of practical organisational activities. Second,

actual turnover may not always be an outcome of prosociality in practical situations because many teachers modify their turnover intention for other reasons, such as difficult financial situations or re-employment issues, before actually quitting their jobs.

Our results support the findings of previous studies that have shown that other-oriented motivation makes people more tolerant in their jobs (e.g. Hu and Liden, 2015). For example, people who are concerned about others are likely to be resilient, which plays an important role in enhancing the ability to manage stress (Kinman and Grant, 2011). Thus, prosocially motivated teachers may be resilient and tolerant in their jobs because they want to help others more. It could also be that a teacher's core goals and objectives are defined in terms of helping others (Grant and Campbell, 2007). When one's personal value is congruent with the organisational value, the person show a long-term commitment to the organisation (e.g. Moynihan and Pandey, 2008). Since teachers hold values geared towards helping others, they may feel that they are working in accordance with their own values, which leads to less turnover intention when they are prosocially motivated.

### **Limitations and future research**

Our cross-sectional data limits the potential for causal inferences. Although our analysis is based on Grant's (2007) theoretical framework, and our results support it, it is possible that reverse associations also exist. For example, it has been shown that collective prosocial motivation leads to employee cooperation (Hu and Liden, 2015). Therefore, a cross-lagged longitudinal design should be employed in the future to shed more light on the issue.

We used self-reported data. Therefore, we cannot rule out the possibility of a common source bias (i.e. participants used a cognitive schema to generalise their evaluations) (Podsakoff

et al., 2010). Future research should use various data sources including, for example, data on collaboration evaluated by outside persons.

Our results offer several promising directions for future research. We did not discuss or examine prosocial motivation in relation to autonomy in self-regulation (Ryan and Deci, 2000). Teaching as an occupation requires emotional investments for others (Chang, 2009). If teachers are forced to have prosocial value, they may perceive their job negatively, and it may affect outcomes such as well-being. Therefore, the relationships between prosocial motivation and its potential outcomes should be examined in relation to other aspects of motivation.

Furthermore, prosocial orientation may differ across persons and positions. It has been shown that prosocial behaviour such as organisational citizenship behaviour can include different orientations, for example, towards individual, towards colleagues and towards the organisation (Somech, 2016). Thus, the orientation of prosocial motivation may have several possible competing levels, such as towards students, colleagues, and towards the school as an organisation.

### **Practical implications and conclusion**

Our results draw attention to the importance of creating a job structure to generate the experience of benefitting others. Educational leaders should provide teachers with more opportunities to experience prosocial impact. For example, receiving positive feedback from colleagues boosts teachers' prosocial impact. Prosocial impact can also be enhanced when leaders' messages assure that teachers that their work has meaningful consequences for other people (Grant and Hofmann, 2011).

An educational organisation can use our findings to reduce teachers' turnover by encouraging a collaborative environment and prosocial motivation. For example, task

interdependence is key to enhancing the relationship between prosocial motivation and employees' turnover (Hu and Liden, 2015). Thus, to facilitate interactions and communications, educational managements should carefully coordinate task-sharing activities among the school staff.

Educational scholars have often acknowledged the importance of other-oriented values in educational organisations (Cerit, 2009; DiPaola and Tschannen-Moran, 2001). However, few studies have explored what kind of environment cultivates these values and what kinds of behavioural outcomes they may generate. In line with the Job Impact Framework (Grant, 2007), this study demonstrated that teachers are motivated to help others in a collaborative environment that allows them to experience the process of benefitting others, thereby mitigating their intention to leave.

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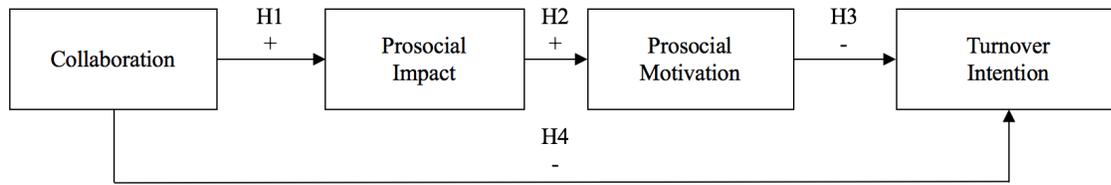
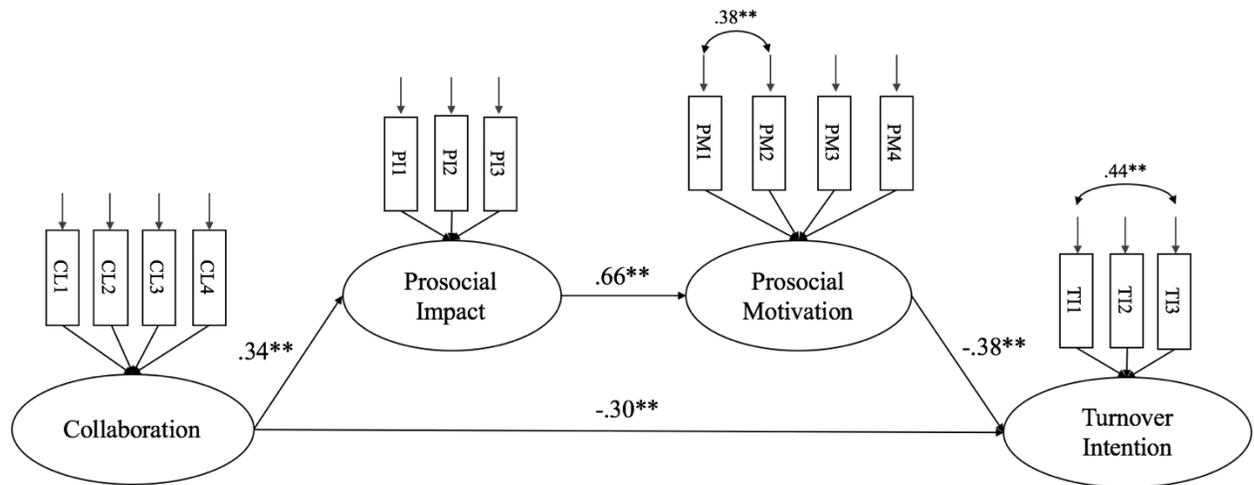


Figure 1. Theoretical Model of the Study based on the model by Grant (2007)



NOTE: \*\* p value < 0.01, \* p value < 0.05

Figure 2. Structural Model Results for the Overall Mediation Model. Standardized estimates are presented.

Table 1. Pearson Correlations of the Observed Variables (N = 260)

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Collaboration1	39.81	7.45	-	.45***	.36***	.46***	.20**	.25***	.15*	.26***	.26***	.18**	.23***	-.11	-.21**	-.11
2. Collaboration2	33.18	9.86		-	.40***	.47***	.20**	.28***	.27***	.16**	.23***	.12	.12	-.14*	-.25***	-.18**
3. Collaboration3	34.30	9.78			-	.60***	.18**	.30***	.21**	.24***	.25***	.23***	.25***	-.13*	-.22**	-.13*
4. Collaboration4	37.08	8.73				-	.09	.20**	.14*	.28***	.24***	.24***	.23***	-.26***	-.18**	-.17**
5. Prosocial Impact1	4.62	1.44					-	.80***	.70***	.40***	.41***	.58***	.50***	-.10	-.25***	-.14*
6. Prosocial Impact2	4.66	1.27						-	.66***	.46***	.43***	.48***	.47***	-.08	-.32***	-.16**
7. Prosocial Impact3	4.71	1.25							-	.37***	.42***	.56***	.47***	-.17**	-.30***	-.25***
8. Prosocial Motivation1	5.00	1.35								-	.74***	.59***	.68***	-.17**	-.32***	-.23***
9. Prosocial Motivation2	5.03	1.41									-	.59***	.73***	-.13*	-.29***	-.18**
10. Prosocial Motivation3	4.78	1.40										-	.73***	-.14*	-.25***	-.24***
11. Prosocial Motivation4	4.97	1.37											-	-.15*	-.29***	-.20**
12. Turnover Intention1	2.01	1.56												-	.26***	.55***
13. Turnover Intention2	3.37	1.84													-	.40***
14. Turnover Intention3	2.58	1.73														-

NOTE: \*\*\*  $p < 0.001$  (2-tailed), \*\*  $p < 0.01$  (2-tailed), \*  $p < 0.05$  (2-tailed)