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Voet, J. van der; Steijn, A.J.

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Relational Job Characteristics and Prosocial Motivation: A Longitudinal Study of Youth Care Professionals

Joris van der Voet[1] and Bram Steijn[2]

Abstract

This study examines how changes in relational job characteristics relate to the prosocial motivation of public professionals. Drawing on relational job design theory, changes in job contact and job impact are hypothesized to covary with prosocial motivation. With a unique longitudinal design, we study youth care professionals in The Netherlands, who are embedded in a reform aimed at decentralizing youth care to bring professionals closer to their clients. Quantitative data were collected through a three-wave survey prior to the reform implementation and at, respectively, 1 and 2 years after its implementation. The results indicate that changing levels of job contact and job impact are related to changes in prosocial motivation. The study contributes to academic debates regarding the dynamic nature of prosocial motivation and our findings provide longitudinal evidence for relational job design theory.

Keywords

public service motivation, prosocial motivation, job characteristics, relational job characteristics

Prosocial motivation is a motivational force that drives effort based on meaning and purpose. Grant (2008a) defines prosocial motivation as "the desire to expend effort to benefit other people" (p. 49) or "the desire to benefit others or expend effort out of concern for others" (Bolino & Grant, 2016, p. 604). The notion that prosocial motivational dispositions are especially present in public sector workers is reflected in the

[1]Leiden University, Leiden, The Netherlands
[2]Erasmus University Rotterdam, Rotterdam, The Netherlands

Corresponding Author:
Joris van der Voet, Institute of Public Administration, Leiden University, Turfmark 99, 2511 DP, The Hague, The Netherlands.
Email: j.van.der.voet@fgga.leidenuniv.nl

public management literature, although most studies use the public service motivation (PSM) concept to refer to these dispositions (Ritz, Brewer, & Neumann, 2016; Wright & Grant, 2010). Contemporary scholarly inquiry has questioned to what extent prosocial motivation should be seen as a relatively stable disposition or whether it is dynamic and changeable over time. In this respect, several authors have argued how environmental and organizational factors may contribute to changes in prosocial motivation over time (Moynihan & Pandey, 2007; Perry, 1997). A limitation of much of the existing evidence is that most studies are based on cross-sectional rather than longitudinal research designs (Wright & Grant, 2010). Nevertheless, more recent longitudinal research suggests that prosocial motivations are to some extent dynamic in the face of workplace experiences and external shocks (Brænder & Andersen, 2013; Kjeldsen & Jacobsen, 2013; Oberfield, 2014) but that prosocial motivation appears to be relatively stable in the long run (Vogel & Kroll, 2016).

In seeking to uncover what factors may be related to prosocial motivation, scholars have highlighted a number of factors associated with the design of jobs. Specifically, relational job design theory states that public sector jobs may contain a number of characteristics that contribute to the cultivation of prosocial motivation (Grant, 2007, 2012). A distinction is made between two relational job characteristics: job contact with beneficiaries and job impact on beneficiaries (Grant, 2008a). Contact with beneficiaries enables employees to better understand the perspective and needs of clients, and provides employees with feedback about client experiences. Impact on beneficiaries means that employees can observe the difference their job makes for others and thus makes employees feel that their work is significant and important (Grant, 2008a; Steijn & van der Voet, 2019; Taylor, 2014). Particularly in a public sector context, these factors are of importance as employees are believed to have a strong need to make a prosocial difference but may simultaneously lack the possibilities to connect with beneficiaries and observe the impact of their work (Grant, 2008c).

Our study contributes to the literature on prosocial motivation and relational job characteristics because (quasi-)experimental work has only examined how relational job characteristics can be used to activate prosocial motivation in the short term to increase work effort and task performance (Bellé, 2014; Grant, 2012). Other studies have examined prosocial motivations over time as a consequence of organizational experiences but do not explicitly consider variables that may explain changes in motivation over time (Brænder & Andersen, 2013; Vogel & Kroll, 2016). We explicitly assess relational job characteristics as a mechanism that may account for variability in prosocial motivation over time. In doing so, we thus provide a longitudinal test of relational job design theory (Grant, 2007), which has not been done before. For the purpose of this study, we draw on panel data that were collected in three yearly measurements in the context of an ongoing youth care reform in The Netherlands. Our main research question is as follows:

Research Question: To what extent are changes in relational job characteristics related to prosocial motivation of youth care professionals?

In the next section, we outline our theoretical framework, which includes an overview of similarities and differences between the prosocial motivation and PSM concepts. In this respect, we argue that research findings about prosocial motivation are also relevant for the PSM literature.

Theory

Positioning Prosocial Motivation

Public management research has had intensive attention for the motivations of public sector workers in the past decades (Grant, 2008b, 2008c; Perry & Hondeghem, 2008; Vandenabeele, 2007). As one of the few "native" or "homegrown" concepts in public management, public management research has focused almost exclusively on PSM (Perry & Wise, 1990), whereas other disciplines such as psychology and management sciences have more generally emphasized prosocial motivation and altruism. Bolino and Grant (2016) provided an overview of the latter literature, including an explanation of the distinction between prosocial motivation and altruism. Following Grant and Berg (2011), they note that "prosocial motivation can involve, but should not necessarily be equated with altruism; it refers to a concern for others, not a concern for others at the expense of self-interest" (p. 77). In contrast with altruism, pursuing prosocial motivation by expending effort to help others may thus result in positive personal outcomes, such as a sense of fulfillment or improved status.

Several authors have stated that PSM can be seen as a specific type of prosocial motivation (Kjeldsen & Andersen, 2012; Perry & Hondeghem, 2008). The original definition of PSM stressed that it is "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry & Wise, 1990, p. 368), and thus is inherently connected to a public sector context. Perry and Hondeghem (2008) have stated that PSM is a

> specific expression of prosocial, other-oriented motives, goals, and values. PSM understood either as institutionally unique motives associated with public service, or beliefs and values that transcend self and organizational interests on behalf of a larger political entity, could be conceived as a subset, for instance, of the overarching idea of altruism. (p. 295)

Similarly, Perry, Hondeghem, and Wise (2010) have stated that "PSM is a particular form of altruism or prosocial motivation that is animated by specific dispositions and values arising from public institutions and missions" (p. 452). According to this perspective, PSM is thus a contextual prosocial motivation that is particularly relevant in the public sector (Grant & Berg, 2011). However, other authors take the position that PSM is less bound to the specific context of the public sector and argue that "public service motivation is an expression of prosocial and other-oriented motives and values and actually represents an individual's predisposition to enact altruistic or prosocial behaviors regardless of setting" (Liu, Tang, & Zhu, 2008, p. 720). Similarly,

Kjeldsen (2012, p. 7, in Bozeman & Su, 2015) argues that the PSM concept is used to describe "individuals' motivation to contribute to society and help other people . . . regardless of whether this takes place in the public or private sectors" (p. 702). PSM's emphasis on public sector institutions is stressed by some authors, but not mentioned or even challenged by others. In a conceptual and theoretical critique of PSM, Bozeman and Su (2015) similarly have argued that different definitions of PSM do not equally emphasize the degree to which it is connected to, or derived from, institutions or missions that are specific to the public sector. They conclude that definitions of PSM have not (yet) clearly and consistently set the *locus* of PSM apart from related concepts.

In an attempt to differentiate between prosocial motivation and PSM, other authors have pointed at the *focus* of both concepts: the intended beneficiary of expended motivational effort. Some definitions of PSM (e.g., Perry et al., 2010) state that prosocial motivation may be "animated" by public missions and institutions, but do not specify at whom—individual citizens or society at large—the motivational effort is directed (p. 452). Some have argued that prosocial motivation can be distinguished from PSM in the sense that PSM is the desire to contribute to a specified community or group, whereas prosocial motivation is a more general motivational driver aimed at helping or improving the lives of others (Schott, Neumann, Baertschi, & Ritz, 2019). This resonates with the distinction made between "PSM directed towards society" versus "PSM directed towards others" (Kjeldsen & Andersen, 2012) and PSM versus an individual "user orientation" (Andersen & Kjeldsen, 2013; Jensen & Andersen, 2015). Vandenabeele, Ritz, and Neumann (2018) make a similar distinction by stating that prosocial motivation has a broad scope in the sense that it can be aimed at identified, known beneficiaries as well as unknown beneficiaries, whereas PSM mainly concerns the motivation to benefit unidentified or unspecified beneficiaries.

However, the distinction between society at large versus known, individual users as the intended beneficiary is not consistently found within the literature. For instance, definitions of prosocial motivation stress that both society as well as individual users may be the intended beneficiary (Grant & Berg, 2011; Kjeldsen & Andersen, 2012), and not all definitions of PSM explicitly emphasize society as the (sole) beneficiary (Perry & Hondeghem, 2008). Recently, Nowell, Izod, Ngaruiya, and Boyd (2016; see also Boyd, Nowell, Yang, & Hano, 2018) proposed sense of community responsibility (SOC-R) as an alternative concept. Like PSM, SOC-R refers to an "other-regarding" aspect of motivation (Nowell et al., 2016, p. 664). According to Nowell et al. (2016), "the interaction between existing belief systems and a given context manifests into a context-specific social identity, which serves to guide behavior within that setting" (p. 666). Within this concept, the locus of the concept is specific to the context "(b)ecause the driver of behavior in this model is psychological coherence between identity and action in a given set" (Nowell et al., 2016, p. 666). Compared with PSM and prosocial motivation, SOC-R thus more explicitly emphasizes contextual specificity. In definitions of prosocial motivation, a specified social collective as the beneficiary of motivational effort is not stated. Definitions of PSM tend to refer to unspecified or unknown individuals as part of a larger societal collective. Attention for a specific beneficiary of motivational effort thus more clearly separates PSM and prosocial motivation from

alternative concepts such as SOC-R, but less clearly informs the conceptual boundaries between PSM and prosocial motivation.

Another aspect that makes it difficult to disentangle PSM from prosocial motivation concerns the measures used to observe the concept empirically. Wright and Christensen (2010) have argued that a large portion of PSM research does not rely on dimensional measures but rather on general measures that emphasize contributing to society or helping others (for instance, Vogel & Kroll, 2016). In addition, Wright, Christensen, and Pandey's (2013) study shows that the global measure for PSM is empirically indistinguishable from prosocial motivation. This means that, despite wishes and attempts to conceptually differentiate the concept of PSM as a distinct motivational driver, such differences are often lost in empirical examinations.

Summarizing, we argue that the differences between prosocial motivation and PSM concerning their locus and focus, as well as their measurement, are currently not clear-cut. In our view, it has been rightfully argued that more conceptual and empirical work is needed to resolve these issues (Bozeman & Su, 2015). Nevertheless, it is clear that prosocial motivation and PSM share common underpinnings and ideas. Regarding such differences, Perry and Hondeghem (2008) state that "the commonalities among the research traditions identified above are far more important than disciplinary differences" (p. 5). Therefore, we argue that although our research focuses on the concept of prosocial motivation, research findings on PSM can be used to develop theoretical expectations regarding prosocial motivations. Similarly, our findings about prosocial motivation will be relevant for PSM research. For the purposes of this article, we focus on the concept of prosocial motivation and use this as a broad, overlaying concept that encompasses more context-specific concepts such as PSM (cf. Grant & Berg, 2011).

Dynamic Characteristic or Stable Trait?

A wide range of concepts have been used to investigate the other-regarding motivations of employees. Regardless, public sector employees are generally believed to be characterized by high levels of prosocial motivation, arguably more so than their private sector counterparts (Andersen & Kjeldsen, 2013; Steijn, 2008). One of the initial explanations offered for this observation is that those individuals with a high prosocial motivation are particularly attracted to jobs in a public sector organization, because the missions and tasks performed by such an organization allow them to fulfill their desire to contribute to society (Asseburg & Homberg, 2018; Kjeldsen & Jacobsen, 2013). This mechanism of attraction, selection, and attrition offers a rather static explanation for why prosocial motivation is prominent in the public sector. It posits that highly prosocial motivated individuals select into public sector employment, but is unable to account for how prosocial motivation may develop after an individual becomes a member of a public organization. As prosocial motivation is an important antecedent of outcomes such as job satisfaction, intention to leave, effort, and performance (Bellé, 2014; Grant, 2008a, 2012; Taylor, 2014), there is both a practical and scientific need to assess how prosocial motivation develops over the course of time as a consequence

of organizational influences and experiences (Moynihan & Pandey, 2007; Perry, 1997; Vandenabeele, 2007; Wright & Grant, 2010).

Several studies—both within the literature on prosocial motivation (Bolino & Grant, 2016) as well as the PSM literature—have emphasized the need to provide more insight in the dynamic, adaptive aspects of prosocial motivation. For example, Perry (1997) formulated a process theory concerning the relationships between society, organizations, and prosocial motivations in which organizational incentives and the work environment provide organizational members with stimuli and cues for their personal values, identities, and motivations. Moynihan and Pandey (2007) examine how organizational factors such as red tape and organizational culture may affect PSM. In addition, it has been argued that performance-related pay may crowd out motivation (Bellé, 2015; Georgellis, Iossa, & Tabvuma, 2011).

Wright and Grant (2010) argued that it remains unclear to what extent public sector organizations can affect prosocial motivations of employees because most research has been based on cross-sectional research designs. Since then, several longitudinal and (quasi-)experimental studies have been published about the dynamic aspects of motivation in the public sector. In their longitudinal study—based on four-wave panel data that span a period of 16 years—on stability and change of PSM-related values, Vogel and Kroll (2016) conclude "that there seems to be more support for the stability hypothesis" (p. 69). Other (quasi-)experimental studies highlight how prosocial motivations are affected by beneficiary contact and transformational leadership (Bellé, 2014; Grant, 2012) or mission matching (Smith, 2016). Although these studies are not focused on variations in employees' levels of prosocial motivation over a longer period of time, they do indicate that prosocial motivations can temporarily be activated to achieve higher levels of individual performance and effort. Research in the Danish context has highlighted shock effects as the drivers of changing prosocial motivations. Kjeldsen (2014) and Kjeldsen and Jacobsen (2013) report how job entry of social welfare and physiotherapy students decreases their PSM. Kjeldsen and Jacobsen (2013) find that this decrease in PSM is stronger in private employment than public employment as processes of socialization in the public sector may emphasize public values and thereby reinforce PSM. Similarly, Brænder and Andersen's (2013) study of Danish soldiers before and after deployment to Afghanistan shows evidence of a shock effect that decreases compassion but increases commitment to the public interest. These results are consistent with the finding by Vogel and Kroll (2016) that temporary declines in prosocial motivation may occur after significant life events, after which levels of prosocial motivation are likely to return to previous levels. In this study, we do not examine shock effects but, as outlined in the next section, we explicitly focus on the relationship between dynamic relational job characteristics and prosocial motivation.

Relational Job Characteristics and Prosocial Motivation

Job characteristics are a central point of attention in classic theories on employee motivation. The core of Hackman and Oldham's (1976) job characteristics theory is that

the design of the job determines the motivational state of the worker. Employee motivation is dependent on a high degree of experienced meaningfulness of the work, a high degree of responsibility in the work, and knowledge of the actual results of work activities. Hackman and Oldham (1976) postulate that these "critical psychological states" are determined by "rich" job designs: high levels of skill variety, task identity, task significance, autonomy, and feedback (p. 256).

The job design model of Hackman and Oldham (1976) relates job characteristics to employee work motivation: the amount of effort employees exert on the job. Instead, Grant (2007, 2008a) relates job characteristics to prosocial motivation. Whereas Hackman and Oldham identify mainly structural characteristics of the way the job is carried out, the central thesis of Grant's theory is that the degree in which a job contains social aspects is an important predictor of an employee's prosocial motivation. In this view, jobs can be "designed to do good" by changing the relational job characteristics. This implies that, according to Grant, prosocial motivation is a dynamic state: changes in relational characteristics will be reflected in changes in the degree of prosocial motivation. In PSM research, organizational antecedents, including job characteristics, are seen as important but evidence about effects is relatively scarce. Relational job design theory provides a mechanism linking organizational context to prosocial motivation.

Grant (2007) distinguishes between two types of relational job characteristics: job contact with beneficiaries and job impact on beneficiaries. First, job contact with beneficiaries provides employees with the opportunity to interact and communicate with the people who benefit from their work. As is also argued by Hackman and Oldham (1976), this may provide employees with feedback regarding the results of their job. Contact with beneficiaries may also allow employees to better understand the perspective of clients, leading to increased identification and empathy (Taylor, 2014). Increased interaction with clients will emotionally charge work experiences and employees will become more affectively engaged "as a result of firsthand exposure to their actions affecting a living, breathing human being" (Grant, 2007, p. 307). Thus, increased job contact fuels prosocial motivation. A second relational job characteristic discerned by Grant (2007) is job impact on beneficiaries. The perception that one's work has a positive impact on the lives and well-being of beneficiaries makes employees feel that their work is significant and important. This signals to them that their work is meaningful; one of the critical psychological states also identified by Hackman and Oldham (1976). A high level of task identity, doing a job from beginning to end with a visible outcome, allows employees to directly observe the impact of the job. A visible, positive impact of the job provides employees with a feeling that their tasks matter. The perception that the work is meaningful will lead to increased prosocial motivation (Grant, 2007).

This theory assumes that prosocial motivation is a dynamic state as the work of public sector employees may be subject to change. Following the mechanisms described above, an increase in job contact and job impact may cultivate prosocial motivation over time, whereas a decrease in job contact and job impact may lead to a diminishing prosocial motivation. Based on relational job design theory, we thus

expect that changes in relational job characteristics will be related to changes in prosocial motivation. The main contribution of our study is that the relationships between job contact, job impact, and prosocial motivation are assessed in a longitudinal study spanning over three measurements and 2 years. In this way, it is possible to establish whether changes in relational job characteristics covary with changes in prosocial motivation. We therefore formulate the following two hypotheses:

Hypothesis 1: Increased job contact is positively related to higher prosocial motivation.
Hypothesis 2: Increased job impact is positively related to higher prosocial motivation.

Research Design and Method

Case Selection

To test our hypotheses, a context in which relational job characteristics were likely to change is required. A nationwide youth care reform in The Netherlands provided the opportunity to do so. This reform is commonly referred to as the "decentralization of youth care," because it decentralizes the responsibilities for youth care delivery from the national to the municipal level (Dijkhoff, 2014). The reform was implemented nationwide and was formally initiated on January 1, 2015. However, the implementation process is lengthy, causing professionals to be embedded in a context of ongoing change for multiple years.

The decentralization of youth care is not just a shift in governance responsibilities, but is also intended to have impact on the work of youth care professionals. The reform aimed to organize generalist, first-line youth care closer to care recipients by organizing them in so-called "neighborhood teams" and restrict access to specialist, second-line youth care. These teams consist of professionals from multiple disciplines that are jointly responsible for a certain neighborhood or district. At the same time, the reform also attempted to cut back on expenses by stimulating a greater use of the personal network (family, friends, and neighbors) of care recipients. The care recipients should become more self-reliant and the role of the professional should change to a process monitor rather than a direct caregiver. In the context of this reform, it is likely that relational job characteristics of youth care professionals will change throughout the ongoing implementation of the reform. Because all youth care professionals are affected by the reform, the reform is a suitable context to study changes in relational job characteristics and prosocial motivation, rather than a variable of interest.

The organization of youth care in the Netherlands is fragmented and youth care organizations work locally in the Netherlands. Therefore, the study was limited to the two largest city-regions in The Netherlands: the Amsterdam region and the Rotterdam region. Based on the information of key informants, the most important youth organizations in these regions (two in the Amsterdam city-region and four in the Rotterdam city-region) were contacted. Five of the six organizations agreed to

participate; only a relatively small organization in the Rotterdam area declined. Although no exact administrative figures exist, this study includes the majority of youth care workers employed in these areas. For instance, according to the municipality, in 2015, the three Rotterdam area organizations employed 72% of youth care workers in neighborhood teams.

Method

As explained above, with some exceptions, most studies about the stable or dynamic nature of prosocial motivation have a cross-sectional design or were not able to follow the same set of employees over time (like the panel study of Vogel & Kroll, 2016). As argued by Wright and Grant (2010), a longitudinal design is needed in research on prosocial motivation or PSM. Through our longitudinal design, we are able to follow a group of youth care employees over time, which makes it possible to study how changes in relational job characteristics covary with changes in prosocial motivation. An online survey was conducted in the participating organizations at three points in time. The purpose of the survey was to collect longitudinal measures of the relational job characteristics and prosocial motivation of youth care professionals. All professionals active in the primary processes of the organizations (caregivers) were contacted for the survey. Support staff were not included. The first wave (t0) was conducted in December 2014, just prior to formal initiation of the reform. The second wave (t1) took place 1 year later in December 2015. The third wave (t2) took place about two years after the initial wave (January 2017). The response rate for the survey at t0 is 50.3% (577 responses from 1,148 individuals), 37.6% at t1 (506 responses from 1,344 individuals) and 36.4% at t2 (470 responses from 1,292 individuals).

As the dependent and independent variables were all measured using the same survey instrument, common source bias can potentially inflate statistical correlations in our analysis. To reduce evaluation apprehension and social desirability bias, the survey emphasized anonymity of respondents (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The purpose of the questionnaire was not revealed to prevent hypothetical guessing by respondents (Brannick, Chan, Conway, Lance, & Spector, 2010).

Unique ID numbers were attributed to the respondents to connect responses from individuals. To conduct longitudinal analyses, only those individuals with a complete response on the variables in this study for at least two of the 3 years were selected for the purposes of this study. As is indicated in Table 1, 119 individuals responded to the survey in all three waves, 97 individuals responded for t0 and t1, 82 individuals responded at t0 and t2, and 85 individuals responded at t1 and t2. The remainder of this article is thus based on a sample of 885 observations across 383 individuals.

As indicated in Table 2, statistical tests reveal no statistically significant differences in terms of demographic characteristics (gender, age, and tenure) or type of professional (neighborhood team or specialist) across respondents in the 3 years. This test indicates that, despite a lower response rate in t1 and t2 as compared with t0, the composition of the sample is equal across the three measurements.

Table 1. Number of Individuals and Observations Across Three Waves.

	t0	t1	t2	Total individuals
t0, t1 and t2	119	119	119	119
t0 and t1	97	97	0	97
t0 and t2	82	0	82	82
t1 and t2	0	85	85	85
Total observations	298	301	286	885 observations across 383 individuals

Table 2. One-Way ANOVA Regarding Demographic Characteristics of the Sample Across Three Waves.

	t0 ($N = 298$)	t1 ($N = 301$)	t2 ($N = 286$)	*F* value
Gender (dummy variable: 1 = *female*)	0.083 (0.38)	0.084 (0.36)	0.084 (0.37)	.013
Age	42.0 (9.54)	42.0 (9.99)	41.3 (10.00)	.043
Tenure	9.99 (6.24)	9.75 (6.42)	9.46 (6.71)	.050
Neighborhood team (dummy variable: 1 = *no*)	0.63 (0.48)	0.58 (0.49)	0.60 (0.50)	.086

Measures

Prosocial motivation, job contact, and job impact were measured using the measurement scales developed by Grant (2008a). All items are given in the appendix. The study's central concepts were measured using 7-point Likert-type scales, ranging from 1 (*completely disagree*) to 7 (*completely agree*). The full items are given in Table 3. The original scales were translated to Dutch for the purposes of the study. It must be noted that we thus measure job contact and job impact as *perceived* by the respondents.

Three demographic control variables were used. Respondents were asked to report their gender, age (in years), and organizational tenure (in years). Education level is not included in the analysis as youth care professionals are highly homogeneous in terms of educational background. Furthermore, respondents were asked whether they were part of neighborhood teams at the time of the survey (*no* = 1). This distinction is relevant in terms of job contact because professionals in neighborhood teams operate in the "first line" of youth care delivery, whereas specialists operate in the "second line" and therefore have contact with a more select group of clients.

Results

As this study examines relationships between latent variables over multiple years, measurement invariance across the 3 years should be warranted. We test for configurational, metric, and scalar invariance by means of multiple group confirmatory factor

Table 3. Multiple group CFA.

	Cmin/*df*	CFI	RMSEA	PCLOSE	SRMR	Chi-squarediff. test
Initial measurement model (4–6–6)						
No constraints (*configurational invariance*)	979.082/303 = 3.231	.93	.05	.438	.06	—
Constrained factor loadings (*metric invariance*)	1058.937/335 = 3.161	.93	.05	.591	.06	.000
Constrained means and intercepts (*scalar invariance*)	1153.242/367 = 3.142	.92	.05	.638	.06	.000
Adjusted measurement model (2–4–6)						
No constraints (*configurational invariance*)	424.417/153 = 2.774	.96	.05	.952	.05	—
Constrained factor loadings (*metric invariance*)	440.774/177 = 2.490	.97	.04	.999	.05	.875
Constrained means and intercepts (*scalar invariance*)	513.176/201 = 2.553	.96	.04	.998	.05	.000

Note. CFA = confirmatory factor analysis; CFI = comparative fit index; RMSEA = root mean square error of approximation; PCLOSE = *p* value for test of close fit; SRMR = standardized root mean square residual.

analysis (CFA), which is a widespread technique for testing measurement invariance (cf. Kim et al., 2012). We specify a measurement model with four items for prosocial motivation, six items for job contact, and six items for job impact.

We examine model fit of this 4–6–6 measurement model across the 3 years with no additional constraints (configurational invariance), constrained factor loadings (metric invariance), and constrained means and intercepts (scalar invariance). The results reported in Table 3 indicate that this measurement model does not meet the .95 threshold for the comparative fit index (CFI), indicating that configurational equivalence cannot be established across the 3 years. In addition, the statistically significant *p* values of the chi-square difference tests lead us to reject the null hypothesis that the factor loadings, means, and intercepts across the three yearly measures are invariant. This indicates that metric and scalar invariance of the initial measurement model are also not warranted.

We respecify the measurement model by removing four items that show highly variable factor loadings across the three yearly measurements (PM1, PM4, JC4, and JC6—see the appendix). This results in an adjusted 2–4–6 measurement model with two items for prosocial motivation, four items for job contact, and six items

for job impact. The fit indices reported in Table 3 indicate that the adjusted measurement model provides good model fit across the 3 years, thereby establishing configurational measurement invariance. Fit indices for the models with constrained factor loadings and constrained means and intercepts are also satisfactory. The *p* value of the chi-square difference test between the unconstrained model and the model with constrained factor loadings cannot reject the null hypothesis that groups are invariant in terms of factor loadings, providing evidence of metric measurement invariance. The chi-square difference between the model with constrained factor loadings and the model with constrained means and intercept is statistically significant, indicating that the adjusted measurement model is not scalar invariant.

In Table 4, descriptive statistics (mean and standard deviation) and correlation coefficients are given for all variables in the analysis. The average value for prosocial motivation across three measurements is 6.36. The respondents in this study are thus characterized by a high degree of prosocial motivation. The mean value for the opportunity to have contact with beneficiaries is 5.48. The average value for the average opportunity to positively affect the lives of others is also rated well above the midpoint of the scale, with a score of 5.27. The demographic variables indicate that 84% of the sample is female, with an average age of 41.8 years. On average, the organizational tenure is 9.7 years, 39% of all respondents work in a neighborhood team in the first line of youth care, and 61% work in a specialist function in the second line.

Prosocial motivation is positively correlated to both job contact and job impact. A strong correlation exists between job impact and job contact, indicating that respondents who report a high degree of contact with clients are likely to experience many opportunities to positively affect their clients and vice versa. Female respondents are likely to be younger than male respondents and are more likely to work in the first line of care rather than in specialist functions. Finally, a strong statistically significant correlation exists between age and tenure, and age is negatively related to being employed in a specialist function.

The average values across 3 years for prosocial motivation, job contact, and job impact are reported in Table 4. The dynamic nature of these variables is discussed based on the analysis presented in Table 5. Table 5 presents the results of an ANOVA analysis to test whether statistically significant differences exist between the three measurements. However, these results should be interpreted with caution, as scalar measurement invariance is not warranted. The results indicate that, on average, little differences in the level of reported prosocial motivation exist between the measurements at t0, t1, and t2. On average, the respondents report a value of 6.30 at t0, 6.38 at t1, and 6.41 at t2. The *F* value indicates that this slight increase is not statistically significant. Regarding the two relational job characteristics, however, a decrease over time is seen. The average value of job contact is stable from t0 to t1, but decreases from 5.54 to 5.35 from t1 to t2. The average value of job impact decreases slightly from t0 to t1, and then drops to an average value of 5.05 from t1 to t2. Both these decreases of job contact and job impact are statistically significant. These results

Table 4. Descriptive Statistics and Correlations ($N = 885$).

		M	*SD*	1	2	3	4	5	6
1.	Prosocial motivation	6.36	0.74	1					
2.	Job contact	5.48	0.87	.278***	1				
3.	Job impact	5.27	0.91	.372***	.635***	1			
4.	Gender	0.84	0.37	−.022	.007	−.047	1		
5.	Age	41.8	9.84	.024	.013	.023	−.209***	1	
6.	Tenure	9.7	6.45	−.024	.040	.058	.021	.425***	1
7.	Neighborhood team	0.61	0.49	.009	−.007	−.069	−.079*	−.064	−.061

*$p < .05$. ***$p < .001$.

Table 5. One-Way Between-Groups ANOVA.

	Year 1 ($N = 298$)	Year 2 ($N = 301$)	Year 3 ($N = 286$)	*F* value (*df*)
Prosocial motivation	6.30	6. 38	6.41	1.73
	(.74)	(.74)	(.74)	(2)
Job contact	5.54	5.54	5.35	4.53*
	(.90)	(.82)	(.89)	(2)
Job impact	5.42	5.33	5.05	13.80***
	(.88)	(.90)	(.90)	(2)

Note. Mean scores are reported on a 7-point Likert-type scale. Standard errors are given in parentheses.
*$p < .05$. ***$p < .001$.

suggest that, on average, there is no statistically significant change in the prosocial motivation of respondents, but that, on average, professionals' opportunities to have contact with, and impact on, clients have decreased.

Although the average value of prosocial motivation seems relatively stable between our three measurements, considerable variation in prosocial motivation over time does exist within respondents. As the final step in our analysis, we therefore assess how prosocial motivation is related to varying degrees of job contact and impact. This allows us to assess, for instance, to what extent prosocial motivation is dynamic over time for those respondents who report changing degrees of relational job characteristics. We perform a multilevel regression analysis with the yearly measurements of variables nested within individuals. This analysis thus allows us to assess correlations between variability in relational job characteristics and prosocial motivation within individuals over time. A Hausman test is done to examine whether differences in coefficients of time-variant variables between fixed and random effects models are systematic or random. This result indicates that these differences are not systematic ($p = .826$). We therefore conduct a random effects regression analysis (cf. Kjeldsen & Jacobsen, 2013), which is given in Model 1 and Model 2 of Table 6. As the main test of our hypotheses, we report a fixed effect model in Model 3 of Table 6, which only contains coefficients for time-variant variables.

Table 6. Regression Analyses.

Predictor variables	Prosocial motivation		
	Model 1 (random effects)	Model 2 (random effects)	Model 3 (fixed effects)
Female gender (dummy: 1 = *yes*)	.025	.003	
	(.084)	(.077)	
Age	.003	.003	
	(.003)	(.003)	
Tenure	−.004	−.007	
	(.005)	(.005)	
Neighborhood team (dummy: 1 = *no*)	.006	0.014	−.006
	(.057)	(0.005)	(.111)
Job contact		.096**	.094*
		(.034)	(.044)
Job impact		.201***	.161***
		(.034)	(.047)
Constant	6.35***	4.69***	4.805***
	(.250)	(.286)	(.271)
R^2 within	.000	.059	.059
R^2 between	.003	.157	.151
R^2 overall	.003	.121	.117
σ_u	.420	.367	.534
σ_e	.596	.580	.580
ρ	.331	.286	.459
Number of observations	885	885	885
Number of individuals	383	383	383
Wald chi-square of model	1.13	101.38***	
F value			10.49***

Note. Unstandardized coefficients (*b*s) are reported. Standard errors are given in parentheses.
*$p < .05$. **$p < .01$. ***$p < .001$.

The rho value in Model 1 indicates that 32.8% of the variance of prosocial motivation is due to the individual (panel) level, whereas 67.2% of the variance exists within individuals across time. Model 1 indicates that the demographic variables, gender, age, and tenure, explain virtually no variance of the changes in prosocial motivation. No statistically significant relationships exist between these time-invariant estimators and prosocial motivation. In addition, membership of a neighborhood team is not related to prosocial motivation. To test Hypotheses 1 and 2, the time-variant variables, job contact and job impact, are added to the analysis in Model 2. These variables jointly explain 15.9% of the overall variation in prosocial motivation. Both job contact ($b = .119$) and job impact ($b = .203$) show positive effects on prosocial motivation, with strong statistical significance. The direction of the relationships is in accordance with the direction specified in Hypotheses 1 and 2. An

increase in job contact or job impact is associated with an increased prosocial motivation and a decrease in job contact or job impact coincides with a decrease in prosocial motivation. We thus interpret these results as providing support for the hypothesis that changing relational job characteristics are related to changing levels of prosocial motivation of welfare professionals.

In the fixed effects model (Model 3), all time-invariant variables are omitted from the analysis. The predictor variables in the model are job contact, job impact, and the dummy variable for neighborhood team (47 out of 383 respondents report changes in their membership of a neighborhood team during the study). The fixed effect model results in similar regression coefficients for job contact and job impact as the random effects model, with statistically significant effects of both explanatory variables. The explained variance of the fixed effects model is roughly equivalent to the random effects model, which underlines the robustness of our results. In the fixed effects model, R^2 for job impact is .161 and R^2 for job contact is .094. The effect size coefficients and R^2 statistics thus suggest that, although both job impact and job contact matter, job impact is more strongly related to prosocial motivation. Because the fixed effects model omits time-invariant variables, we interpret the fixed effects model as the main evidence for correlations between the variability of relational job characteristics and prosocial motivation within individuals over time.

Discussion

Our findings contribute in several ways to the literature about prosocial motivation in general and PSM in particular. First, our results, showing that changes in job contact and job impact covary with changes in prosocial motivation, provide an empirical test of the relational job design theory of Grant (2007, 2008a), which states that job contact with beneficiaries and job impact will affect prosocial motivation. Although relational job characteristics theory has been influential in public management research in recent years, Grant's thesis that levels of prosocial motivation can be shaped by varying job characteristics has until now not been subject to a longitudinal empirical test. Experimental studies such as Bellé (2014) and Grant (2012) show how prosocial motivations may be activated in the short term by relational job characteristics such as beneficiary contact to achieve higher levels of effort or task performance. These studies indicate that at least in the short term, prosocial motivations are dynamic over time. This study thus advances the empirical evidence about how job impact and job contact shape prosocial motivation over a longer time period.

Second, our finding about the importance of relational job characteristics for prosocial motivation adds to the literature about how the work environment may affect prosocial attitudes. In the PSM literature, organizational characteristics are seen as one of the possible antecedents (Moynihan & Pandey, 2007), but there is still limited knowledge about this issue. Especially, little attention has been paid to the underlying mechanisms that explain how organizational antecedents influence PSM (Schott et al., 2019). Our findings suggest relational job characteristics as a mechanism through which organizations can influence prosocial motivations. Relational job

design theory thus provides a mechanism linking organizational antecedents to prosocial motivation.

Third, our findings contribute to the discussion in the literature whether prosocial motivations are a stable trait or a dynamic state (Bolino & Grant, 2016; Wright & Grant, 2010). Earlier, longitudinal studies concerning this issue have found that PSM is dynamic around the fringe. Vogel and Kroll (2016) report that PSM-related values are mostly stable over a 16-year time period, and other researchers have shown that shock effects such as job entry have relatively marginal effects on PSM (e.g., Brænder & Andersen, 2013; Kjeldsen & Jacobsen, 2013). Our results about prosocial motivation are in line with these studies in the sense that prosocial motivation appears to be relatively stable over a 2-year time period. On average, prosocial motivation of our respondents remains at high levels during the 2-year research period. However, our results also indicate that, within individuals, changes in prosocial motivation coincide with changes in their relational job characteristics. A contribution of our study to prior longitudinal work is that we were able to show that changes in relational job characteristics covary with changes in prosocial motivation.

Our research is bounded by some limitations. As a first limitation, we note the possibility that our results are partly driven by common source bias (George & Pandey, 2017; Podsakoff et al., 2003). If the tendency to respond positively to questionnaire items is a personal trait, the estimation of a fixed effects model would exclude such time-invariant personality traits. As such, this reduces the threat of common method bias in this article. Regardless, future research should consider using measures for relational job characteristics that are not self-reported such as administrative data on the amount of contact hours with clients.

A related, second limitation is that our main variables are measured through self-reports. Self-reported measures of prosocial motivation and PSM are common in the public management literature and perhaps unavoidable. However, future research could consider alternative measures of job contact such as administrative data about employee–client appointments. In addition, it could consider not only measuring the frequency and depth of job contact but also their evaluation of the contact, the type of contact, and characteristics of the client (e.g., Maynard-Moody & Musheno, 2003).

A third limitation is that the professionals who were studied are on average characterized by a high prosocial motivation and a rich relational job architecture. This is typical for many "people changing organizations," but different from "people processing organizations" where public employees will have less contact with, and visible impact on, the lives of citizen or clients (Hasenfeld, 1972). A boundary condition of our study is therefore that generalizability of our findings to other empirical settings is not warranted. A recommendation for future research is thus to study the relationship between relational job characteristics and prosocial motivation in settings with less interaction with clients or citizens (e.g., policy makers) or a regulatory context that is less concerned with helping clients (e.g., tax officials). In addition, future studies can find out whether our findings also hold when using comparable concepts such as PSM.

A fourth limitation is that our panel data are subject to attrition. Not all respondents responded to multiple yearly measurements and only 119 out of the 383 respondents included in this study responded to all three surveys. Our analysis does not identify differences in the demographic characteristics of the respondents between the three yearly measurements, which suggests that attrition appears to be random rather than a systematic result of nonresponse bias.

Conclusion

Our three-wave longitudinal panel data spanning 2 years show that job contact is positively related to prosocial motivation. In addition, job impact is also positively related to prosocial motivation. Thus, in accordance with theoretical expectations, changes in relational job characteristics covary with the prosocial motivation of youth care professionals. This suggests that prosocial motivations are in part dynamic and dependent on job characteristics. These results provide a longitudinal empirical test of the thesis of Grant (2007, 2008a) about the relationship between relational job characteristics and prosocial motivation. This is also relevant for practitioners as it shows that changes in work design could affect the (prosocial) motivation of professionals. To preserve or improve prosocial motivation as a resource in the public sector, policy makers and public managers should thus consider the consequences of organizational changes for relational job characteristics.

Appendix

Measurement Scales

Prosocial motivation. PM1—It is important for me to do good for others through my work.[a]
PM2—I care about benefiting others through my work.
PM3—I want to help others through my work.
PM4—I want to have a positive impact on others through my work.[a]

Job contact. JC1—My job allows frequent communication with the people who benefit from my work.
JC2—My job often gives me the opportunity to meet the people who benefit from my work.
JC3—My job enables me to build close relationships with the people affected by my work.
JC4—My job allows me to form emotional connections with the people who benefit from my work.[a]
JC5—My job enables me to interact regularly with the people who benefit from my work.
JC6—My job gives me the chance to have meaningful communications with the people who benefit from my work.[a]

Job impact. JI1—My job gives me the chance to make a significant positive difference in others' lives.
JI2—My job provides opportunities to have positive impact on others on a regular basis.
JI3—My job allows me to have positive impact on others almost every day.
JI4—My job provides opportunities to substantially improve the welfare of others.
JI5—My job frequently improves the lives of others.
JI6—My job has the potential to make others' lives much better.

[a]Item has been removed from analysis based on the Confirmatory Factor Analysis.

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ORCID iD

Joris van der Voet https://orcid.org/0000-0002-3945-5972

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Author Biographies

Joris van der Voet is an assistant professor of public management in the Institute of Public Administration at Leiden University. His research activities are directed at management and leadership behavior during organizational change in the public sector.

Bram Steijn is professor of human resource management (HRM) in the public sector at the Department of Public Administration and Sociology at Erasmus University Rotterdam. His research interests are strategic HRM in public organizations and employee motivation.