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The Relative Importance of Proactive Behaviors and Outcomes for Predicting Newcomer
Learning, Well-Being, and Work Engagement

Abstract

New employees can accelerate and optimize their socialization by behaving proactively, although the key behaviors vary across studies. Recent research suggests that newcomer proactive behaviors influence socialization through the mediating effect of corresponding proactive outcomes. This may partly explain differences across studies, along with possible variations in the relative importance of specific proactive behaviors. This study investigates further the mediating role of proactive outcomes, and the relative importance of different proactive behaviors and proactive outcomes in predicting newcomer learning, well-being, and work engagement. Based on a sample of 176 temporary agency workers, support for the mediating role of proactive outcomes was found, although some proactive behaviors were effective in their own right. Relative importance analyses revealed different proactive behaviors were important for different socialization criteria. Practical and theoretical implications of these findings are discussed.

Keywords: organizational socialization, newcomer, proactive behavior

The Relative Importance of Proactive Behaviors and Outcomes for Predicting Newcomer Learning, Well-Being and Work Engagement

Change is a constant in organizations, with restructuring, mergers and acquisitions, and voluntary turnover resulting in employees frequently being newcomers throughout their careers (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Bureau of Labor Statistics, 2012a). In the US, workers aged between 20 and 40 years change jobs approximately every two years (Bureau of Labor Statistics, 2012b), and even older workers show relatively high rates of job changes, with recent statistics showing 33% of 40-46 year olds staying in a job for less than a year (Bureau of Labor Statistics, 2012a). The majority of newcomers are experienced workers who rely primarily on their own actions to get up to speed (Carr, Pearson, Vest, & Boyar, 2006). There is consistent evidence that new employees can accelerate and optimize their socialization by being proactive, using behaviors such as direct inquiry, feedback seeking, role negotiation, and networking (Ashford & Black, 1996; Bauer et al., 2007; Kim, Cable, & Kim, 2005; Morrison, 1993a, b). Newcomer proactive behavior is associated with positive outcomes including greater learning, social integration, role innovation, job satisfaction, and lower intention of leaving (Ashforth, Sluss, & Saks, 2007; Saks, Gruman, & Cooper-Thomas, 2011).

While proactive behavior seems to hold much promise, with largely positive relationships with desirable outcomes such as task mastery and job satisfaction, results are not consistently positive (Cooper-Thomas & Burke, 2012). For example, while there is some evidence that direct inquiry is positively associated with task mastery and job performance (Ashford & Black, 1996; Bauer et al., 2007; Saks et al., 2011), there is some research showing no relationship (Fedor, Rensvold, & Adams, 1992; Gruman, Saks & Zweig, 2006), while others have found a negative relationship (Settoon & Adkins, 1997). Saks et al. (2011) proposed the construct of proactive outcomes to explain these inconsistent results.

Proactive outcomes reflect the extent to which a proactive behavior achieves its intended goal or outcome. Taking the proactive behavior of direct inquiry as an example, the related proactive outcome is the extent to which the newcomer received an answer to his or her inquiry. Saks et al. (2011) suggested that proactive outcomes act as a conduit determining the influence of proactive behaviors on socialization outcomes. To date, Saks et al. (2011) remains the only study to investigate the role of proactive outcomes and it consisted of a sample of students completing an internship.

The present study also examines proactive behavior and proactive outcomes, however, it makes four contributions to the literature. First, we investigate further the newly-proposed role of proactive outcomes in mediating the relationships between proactive behaviors and socialization outcomes. This provides important scientific evidence replicating this mediation role for proactive outcomes (Ferguson & Heene, 2012). Second, we investigate a broader range of proactive behaviors and proactive outcomes than Saks et al. (2011). They investigated six of each, whereas we investigate ten. This provides a more nuanced view on the role of proactivity during socialization as well as exploring the generalizability of proactive outcomes' nomological networks. Third, we investigate the relative importance of the proactive behaviors in the prediction of the three socialization outcomes through the use of relative importance analysis. This represents an important extension of the literature since it acknowledges the potential for some proactive behaviors to be more important than others for the prediction of certain socialization outcomes. Fourth, our sample consists of temporary agency workers (temps) as potentially expert onboarders due to the self-socialization they have to achieve at each placement. While neophyte student newcomers may provide a more convenient sample (Saks & Ashforth, 1997), veteran newcomers may show greater socialization adroitness (Beyer &

Hannah, 2002). Temps are a potentially expert pool of newcomers given their frequent socialization, revealing proactivity at its full potential.

Theoretical Background

Proactive Behaviors and Outcomes

Proactive behaviors are self-initiated, future-focused, and involve taking control to bring about change (Parker & Collins, 2010). In the context of newcomers, proactive behaviors are aimed at improving person-environment fit by changing the person – that is the newcomer – or the environment – the new work context – or both (Parker, Bindl, & Strauss, 2010; Parker & Collins, 2010). The proactive behavior of newcomers was first investigated in the 1990s, with Ashford and Black's (1996) research being seminal (see also Morrison, 1993a, b; Ostroff & Kozlowski, 1992). They identified seven proactive behaviors: Information seeking, feedback seeking, general socializing, networking, build relationships – boss, negotiation of job changes, and positive framing, and investigated their relationships with job performance and job satisfaction (Ashford & Black, 1996). Their analyses revealed that different and multiple proactive behaviors were important in predicting these two criteria.

Subsequent research has confirmed an important role for proactivity in predicting socialization outcomes including learning, social integration, task mastery, organizational commitment, and intent to remain (Ashforth et al., 2007; Kammeyer-Mueller & Wanberg, 2003; Kim, Hon & Crant, 2009; Major, Turner, & Fletcher, 2006). In line with this, a recent review of newcomer proactive behaviors shows that, in the main, proactive behaviors are associated with positive outcomes (Cooper-Thomas & Burke, 2012), although there are variations. Proactive behaviors which are more consistent predictors include feedback seeking, general socializing, relationship building – boss, positive framing, reading, and monitoring (Gruman et al., 2006; Saks et al., 2011; Wanberg & Kammeyer-Mueller, 2000). Other proactive behaviors have shown

mixed results of either weak positive or null relationships. These proactive behaviors include direct inquiry, networking, role modeling, and changing work procedures. It is plausible that proactive behaviors which have more varied relationships with socialization outcomes across studies may depend on mediation via proactive outcomes. In particular, this second set of proactive behaviors showing more varied results have a greater reliance on input from insiders, for example in responding to a direct inquiry or agreeing on changes to work procedures. These proactive outcomes are harder to achieve, and hence mediation less likely. In contrast, other proactive behaviors such as general socializing and positive framing may show stronger relationships with socialization outcomes because they are more directly under newcomers' control. It is also possible that such proactive behaviors have benefits regardless of whether proactive outcomes are achieved, that is a behavior such as general socializing results in positive outcomes directly.

Saks et al. (2011) examined six of the seven proactive behaviors originally proposed by Ashford and Black (1996) (they did not include positive framing). Subsequent research by Cooper-Thomas, Anderson, and Cash (2012) has identified nineteen proactive behaviors that newcomers use to facilitate their socialization, which they classified into three categories. These were later refined by Cooper-Thomas and Burke (2012), comprising mutual development (e.g., general socializing); change self (e.g., feedback seeking); and change role or environment (e.g., change work procedures). We chose ten proactive behaviors, comprising the full set of seven behaviors outlined by Ashford and Black and an additional three. As Ashford and Black (1996) highlight, it is important to investigate multiple strategies at once to give a more accurate view of relationships, in this case between proactive behaviors, proactive outcomes, and socialization success. If only a narrow range of behaviors is chosen, their relative importance may be over-estimated. However, for pragmatic reasons of survey length we did not include the full range of

proactive behaviors. Specifically, we measured feedback seeking, general socializing, relationship building – boss, positive framing, monitoring, reading, direct inquiry, networking, role modeling, and changing work procedures. First, note that the first six of these ten behaviors listed are those which have yielded consistent evidence of positive relationships with socialization outcomes, while the last four of the ten behaviors have less consistent relationships with socialization outcomes, with positive, weak or negative relationships found. Second, these ten include proactive behaviors across the three categories of mutual development, change self, and change role or environment (Cooper-Thomas et al., 2012; Cooper-Thomas & Burke, 2012), although primarily in the change self category. Third, note that the behavior of changing work procedures differs slightly from Ashford and Black's (1996) job change negotiation. Our sample of temporary agency workers are unlikely to have the power to change what work they do, but may be able to change how it is done, that is the procedures for doing their work.

Various indicators of socialization success have been studied, and this wide range is useful to identify the nuances of relationships between predictors and criteria. For the purpose of this study, we have selected three broad indicators that, while drawn from the newcomer literature, were relevant also to temp newcomers: Learning, well-being, and work engagement. First, we include newcomer learning as a common proximal indicator of socialization (Bauer & Erdogan, 2012). Reviews are consistent in viewing organizational socialization as primarily a learning process (Cooper-Thomas & Anderson, 2006; Klemme Larson & Bell, 2013; Saks & Ashforth, 1997). Moreover, learning is a precursor to other outcomes such as task mastery, job satisfaction, and organizational commitment, mediating the effects of organizational socialization efforts (Cooper-Thomas & Anderson, 2002). In other words, learning about the role, colleagues and the organization is essential to subsequent attitudes and behaviors.

Our second indicator is well-being. Well-being was a concern of early socialization scholars (Fisher, 1985), and has continued to be of interest (Allen, McManus & Russell, 1999; Vandenberghe, Panaccio, Bentein, Mignonac, & Roussel, 2011). In particular, entry into a new organization is acknowledged to be a stressful period. Newcomers may experience a reality that is surprising and different from their expectations (Louis, 1980; Wanous, Poland, Premack, & Davis, 1992), and this can be a cause of stress, or reduced well-being (Vandenberghe et al., 2011). Hence well-being is an important indicator of adjustment.

Third, we included work engagement which has been a focus of research in the last decade as a useful construct in its own right and as an antecedent of performance (Harter, Schmidt, & Hayes, 2002; Rich, LePine, & Crawford, 2010). Work engagement is a state of enthusiastic and complete involvement in work (Rich et al., 2010). While overlapping with more traditionally measured socialization criteria of job satisfaction and organizational commitment, it is distinct from them (Halberg & Schaufeli, 2006). We argue that engagement is relevant to temps despite their impermanent position. Thus they may still be able to immerse themselves in their work roles, perhaps more so as they are not distracted by organizational politics and may be less interdependent with permanent staff. Further, a temp does not need to be committed to their organization, bringing in to question the relevance of organizational commitment. Job satisfaction seems irrelevant also as a temp does not have a “job” as such, which denotes permanence, but rather has “work” or “a temporary role”. Intention to quit is also less relevant – a temp is unlikely to quit given the transactional exchange and limited duration of their work. Overall then, among the possible attitudes to measure, engagement is highly relevant. Moreover, Saks and Gruman (2011) recently proposed that socialization may be a critical period for increasing newcomer engagement. They investigated the relationship between socialization

tactics and newcomer engagement. However, no previous study has examined the relationship between newcomer proactive behaviors and work engagement.

Temporary Agency Workers

The present study focuses on temps, viewing temps as potentially expert newcomers due to the frequency with which they enter new organizations. Temps are a small but significant and growing component of the modern labor market, with almost nine million people contracted to temping agencies in 2009, an increase of nearly 4 million since 1999 (CIETT, 2011). Temps have to guide their own socialization repeatedly as they enter new roles and work environments, receiving minimal support at the client site alongside demands for immediate performance. Hence temps may be particularly adept at behaving proactively, and achieving proactive outcomes, to manage their own adjustment.

It may be questioned whether temps aim to achieve the same outcomes as permanent employees, and therefore the generalizability of socialization research from this sample. Some researchers view temps as less motivated to become socialized due to their short-term focus (Bauer, Morrison, & Callister, 1998), taking temporary work only because permanent work is not available (Connelly & Gallagher, 2004). In line with this, there is some evidence that temps can exhibit relatively poor work-related attitudes in terms of job satisfaction, commitment toward the client organization, and limited motivation (De Cuyper & De Witte, 2006). However, temps are not necessarily marginalized in comparison to permanent workers (Rasmussen, Lind, & Visser, 2004), and temps can show high levels of commitment to both their client organization and their temping agency (blinded for review). Temporary workers may use contract employment as a way-in to permanent employment (de Jong, Schalk, & Goessling, 2007) or as a “career resource” that provides challenge and enjoyment (Inkson, Heising, & Rousseau, 2001), and therefore be highly motivated to work hard and to fit in. While results from the current

research will need replicating with other samples, we argue that temps are likely to have developed their abilities to behave proactively in order to rapidly get up to speed in each new role and organization, and deliver the work they were hired for.

Hypotheses and research questions

Proactive behaviors. In line with past research, we predict that proactive behaviors will be positively related to socialization outcomes, in this case learning, well-being, and work engagement. Taking learning first, organizational socialization involves newcomer learning across various domains (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994), with models of socialization placing learning in a central role (Cooper-Thomas & Anderson, 2006; Saks & Ashforth, 1997). Since newcomers engage in proactive behaviors to acquire information and accelerate their socialization, positive relationships with learning are expected.

Organizational entry is an anxiety-provoking experience (Fisher, 1985; Kammeyer-Mueller, Simon, & Rich, 2012; Saks & Ashforth, 1996). Newcomer well-being is relevant to indicate the extent to which newcomers have regained an equilibrium and feel settled and happy in their new role (Bauer & Erdogan, 2012). Newcomers who behave proactively are likely to address any issues causing them anxiety, such as the uncertainty of their role and setting, and thereby regain a sense of well-being. Furthermore, taking an active role through behaving proactively may in itself promote well-being, in that the newcomer may feel that they are being effective which may develop a positive sense of self (Cooper-Thomas & Wilson, 2011).

Work engagement is the expression of one’s total self in work (Kahn, 1990). Saks and Gruman (2012) propose socialization resources theory which specifies how organizations may provide resources to newcomers during socialization to facilitate engagement. These resources include insider interactions and leader and management support, which underlie many proactive behaviors, such as general socializing, feedback seeking, negotiating, and direct inquiry. Indeed,

past research has shown that interactions with insiders are critical to socialization (Kammeyer-Mueller & Wanberg, 2003; Korte & Lin, 2013; Li, Harris, Boswell, & Xie, 2011; Major, Kozlowski, Chao, & Gardner, 1995). Saks and Gruman (2011) argue that these interactions both provide the antecedents of engagement, that is psychological meaningfulness, safety, and availability (Kahn, 1990), and also promote newcomer self-efficacy. These in turn lead to work engagement. We note here that the reverse has also been proposed, that is that engagement predicts proactivity (Bakker, Tims, & Derks, 2012; Sonnentag, 2003) and even that engagement and proactivity are concomitant (Macey & Schneider, 2008). However, based on Saks and Gruman's consideration of the socialization process, we propose that proactive behavior will result in proactive outcomes such as feedback and social support that are antecedents of work engagement.

Therefore, based on the above, we propose the following hypothesis:

Hypothesis 1: Proactive behaviors will be positively related to a) learning, b) well-being, and c) work engagement.

In addition to investigating relationships between proactive behaviors and socialization outcomes, we examine a wide range of proactive behaviors in the current research to tease out the relative importance of each in predicting the three socialization outcomes. Given the lack of research in this area, we pose the following research question:

Research Question 1: Which proactive behaviors will show the strongest relationships with learning, well-being, and work engagement?

Proactive outcomes. The idea of proactive outcomes is hinted in Ashford and Black's (1996, p. 211) research where they suggest "future studies would benefit from examining both the extent to which newcomers try to negotiate job changes and the extent to which they are successful". The idea was more fully developed by Saks et al. (2011). They note that past

socialization research assumes that proactive behaviors are effective without acknowledging the importance of such behaviors achieving their intended outcomes in order to have positive effects. Saks et al. (2011) found evidence for proactive outcomes mediating the relationships between proactive behaviors and task mastery, role clarity, and social integration, as well as job satisfaction and intent to remain. Regression analyses showed that the most important proactive outcomes were obtaining feedback, receiving information sought, and general socializing. It is also interesting to note that general socializing remained significant as a proactive behavior across most of these analyses suggesting that it is valuable to newcomer socialization regardless of the attainment of proactive outcomes.

Given this initial research strongly supporting a mediating role for proactive outcomes across a range of socialization criteria, we anticipate this same mediating role for proactive outcomes across other indicators of socialization. The criteria selected in this research differ from those used by Saks et al (2011), but our arguments are similar. Specifically, we anticipate that actually achieving intended proactive outcomes will contribute to newcomer socialization, acting as a conduit for proactive behaviors. Moreover, in line with Saks et al. (2011), it is important to first establish whether proactive outcomes have positive direct relationships with their associated proactive behaviors. Therefore, we tested the following hypotheses:

Hypothesis 2: Proactive behaviors will each be positively related to their corresponding proactive outcome.

Hypothesis 3: Proactive outcomes will mediate the relationship between proactive behaviors and a) learning, b) well-being, and c) work engagement.

In line with our interest in determining which proactive behaviors are most important in predicting socialization criteria, we are interested also in identifying which proactive outcomes provide stronger mediation effects, and also whether any proactive behaviors remain significant

when mediation effects are taken into account. This information can contribute to further consideration of theoretical reasons as to why certain proactive behaviors and proactive outcomes are more effective than others. Furthermore, this data is practically useful to newcomers and those advising them, so that they can employ proactive behaviors likely to have the most benefit. Therefore, we pose the following question regarding the importance of the proactive behaviors over and above the proactive outcomes:

Research Question 2: Which proactive behaviors remain important even when the mediating role of proactive outcomes is accounted for?

Method

Participants and Procedure

Participants were 176 temps drawn from 12 temporary work agencies in (blinded for review). The sole criterion for participation was that temps needed to have completed, within the last year, a placement of up to one year duration. This timeframe was decided to increase the likelihood that participants would remember sufficient details of their placement to respond accurately (Ashford & Black, 1996; Chatman, 1991). Participants were asked to respond to questions based on their current placement or, if not currently working, their most recent placement.

Temps were recruited through their temping agency. Temping agency staff sent a direct email to their temps inviting participation and providing information and a link to the online survey ($N = 1,465$). 178 temps completed the survey yielding a 12.2% response rate. Eighty-one percent of participants were female, with an average age of 38 years (range 18 to 62 years of age). Most were (blinded for review) (46.6%), while the rest were (blinded for review) (6.7%), (blinded for review) (6.2%), Asian (7.9%) or of other descent (6.7%). The most recent placement duration, which the questions were oriented toward, was 87 days (range from 1 to 365

days). Placements were primarily in business support (32%), with the remainder working reception (11.2%), call center (10.1%), as personal assistants (5.1%), in health care (1.2%), education (0.5%), labor (0.5%), or in various other specialist occupations (e.g., architecture, recruitment, 10.7%).

Measures

Proactive behaviors and proactive outcomes. The proactive behavior and proactive outcomes measures were adapted from previous research (Ashford & Black, 1996; Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994; Feldman & Brett, 1983; (blinded for review); Miller, 1996; Miller & Jablin, 1991; Morrison, 1993a, b; Ostroff & Kozlowski, 1992; Wanberg & Kammeyer-Muller, 2000). While adapting items can raise validity concerns (Bono & McNamara, 2011; Dannels, 2010), the items we used had been tested in previous psychometric research (blinded for review).

We made two changes to the items from past research. First, we made the items generic to suit the varied contexts in which temps may work. For example, “company” was switched to “work” or “organization” depending on the item. Second, we considered it important to develop a close correspondence between proactive behaviors and matching proactive outcomes.

Therefore past proactive behaviors items were adapted to include an action – the proactive behavior – toward a goal and then were reassembled to create a corresponding immediate proactive outcome item by changing the verb to the past tense and switching the order of components such that the goal preceded the verb (the proactive action). For example, the feedback seeking proactive behavior item “Asked specific, straight to the point questions to get the information you wanted?” was modified to become the immediate proactive outcome item, “Received the information you needed when you asked specific, straight to the point questions?”.

While this close correspondence is desirable to ensure that proactive behaviors and outcomes are

well matched, we chose to change the response scale to reduce common method variance from common scale anchors and potential consistency bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Responses to the proactive behavior items were provided on a 7-point Likert scale, with scale points that reflected the frequency with which the behavior was enacted: 1 (never), 2 (once a fortnight), 3 (once a week), 4 (two or three times a week), 5 (once a day), 6 (two or three times a day), and 7 (four or five times a day). The response scale for proactive outcomes was also 7-point Likert, with anchors of 1 (never), 2 (almost never), 3 (rarely), 4 (sometimes), 5 (often), 6 (very often) and 7 (always). A “not applicable” option was included for this and all other scales following piloting with temps, since it was deemed possible that some of the items would not be relevant depending on temps’ role and work context. Finally, we chose to include three items per construct as the smallest number that could provide reliable measurement while still keeping the overall survey short enough that the response rate would not be adversely affected. All predictors factored satisfactorily in that the items only loaded on the scales they were designed to measure. All loadings were above .6 providing support for the reliability and content validity of our scales. (The full scales are available from the first author). The proactive behaviors predict the criteria as expected, showing evidence of criterion validity. Moreover the correlation of the proactive behaviors and proactive outcomes contributes further to establishing the discriminant validity of these two sets of measures.

The reliabilities for these measures are provided in Table 1. The proactive behavior measures are adaptations of previous scales, and show internal reliabilities from .69-.90 with an average of .83. The proactive outcomes measures are new in this research; their internal reliabilities range from .83-.95 with an average of .89. The only alpha below .70 is for general socializing (.69), and we address the implications of this in the Discussion.

Learning. We used (blinded for review) Newcomer Learning Measure which covers three domains of job (knowing how to perform job tasks), relationships (understanding how one's role fits with colleagues' roles and how to work together), and company (understanding of the organization's objectives and goals). Each domain is measured by six items. This measure was selected because it is the most parsimonious and least occupationally specific newcomer learning scale. Example items are "I understand how to perform the tasks that make up my job" (job), "Other workers have helped me on the job in various ways" (relationships), and, "I understand this organization's objectives and goals" (company). All items were measured on a 7-point Likert scale, with scale points of 1 (strongly disagree), 2 (disagree), 3 (slightly disagree), 4 (neither agree nor disagree), 5 (slightly agree), 6 (agree) and 7 (strongly agree).

Well-being. We used Warr's (1990) well-being measure which comprises two axes of anxiety-contentment and depression-enthusiasm. Each axis is measured by six items. Example items for anxiety-contentment are "calm" and "relaxed"; example items for depression-enthusiasm are "depressed" and "optimistic". A 6-point Likert scale was used with anchors 1 (never), 2 (occasionally), 3 (some of the time), 4 (much of the time), 5 (most of the time) and 6 (all of the time).

Work engagement. We used the short-version of the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003). This contains three items for each of the three factors of vigor ("At my work, I feel bursting with energy"), dedication ("I am enthusiastic about my job"), and absorption ("I get carried away when I'm working"). Items were measured on a 7-point Likert scale with anchors 1 (never), 2 (almost never), 3 (rarely), 4 (sometimes), 5 (often), 6 (very often) and 7 (always).

Analysis

Previous research on newcomer proactivity has used regression analysis, however, because proactive behaviors tend to be positively correlated, a consequence is that multiple proactive behaviors compete to predict variance in a criterion. Thus some of the proactive behaviors which were significantly correlated with the criterion are no longer significant in a regression. A better method of comparing the importance of proactive behaviors is relative importance analysis (Azen & Budescu, 2003, 2006; LeBreton & Tonidandel, 2011), which offers easily accessible ways of determining the importance of multiple predictors while accounting for correlations between them.

Relative importance refers to the amount of variance in a criterion variable that can be attributed to each predictor variable from its direct and combined effects (Johnson & LeBreton, 2004), and is useful when predictors are correlated. Dominance analysis and relative weights analysis are two approaches to assessing relative importance (see Johnson & LeBreton, 2004, for a review). While the methods yield almost identical results, dominance analysis requires significantly greater computational effort, especially with a larger number of predictors. Relative weights analysis has the advantage of simpler execution even with a large number of predictors and hence we chose this method. Relative weights analysis transforms predictors into *maximally related orthogonal variables* which are new variables that are minimally correlated with each other but maximally related to their own respective original predictor variable.

A recent extension to this work has been the introduction of multivariate relative importance analyses to allow for an estimation of the relative importance of correlated predictors for correlated criteria (LeBreton & Tonidandel, 2008). This was relevant to our study as the three criteria are multivariate, being made up of two (well-being) and three components (learning, work engagement). The underlying logic of multivariate relative importance analyses is the same as for univariate relative importance analyses. The difference is the addition of

maximally rotated orthogonal variables for the criterion variables as well (LeBreton & Tonidandel, 2008). These analytical tools allow us to investigate the relative contributions of proactive behaviors and proactive outcomes in predicting socialization criteria.

We used the SPSS syntax provided by LeBreton and Tonidandel (2008) to conduct the multivariate relative importance analysis. Relative weights can be interpreted as a direct measure of variance uniquely explained by the predictor. Therefore they add up to R^2 (or the multivariate equivalent P^2_{XY}) over all predictors (Tonidandel, LeBreton, & Johnson, 2009). Tonidandel and colleagues (2009) propose a method to estimate the statistical significance of relative weights. The resulting estimates tend to be very conservative; bias is minimal with smaller samples but, where it occurs, the results are more likely to be indicated as non-significant. With a sample size of 176, we consider that it is useful to indicate significance in our analyses but note that these may be too conservative. Hence we focus also on the relative weights as measures of effect size.

In order to test for mediation, we used Baron and Kenny's (1986) traditional multistep procedure despite certain drawbacks (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), as there are as yet no established multivariate bootstrapping methods for relative weights. Since we applied a multivariate approach to mediation, we confirmed our analysis with Scott Tonidandel (S. Tonidandel, personal communication, January 19, 2013), testing multivariate mediation by assessing the relative weights of proactive outcomes after controlling for proactive behaviors (LeBreton, Tonidandel & Krasikova, 2013).

Based on the findings of Saks et al. (2011) we expected to find at least a medium effect for all of our regression models. The suggested sample size for a model with 10 predictors and a medium effect size is 150 participants (Miles & Shevlin, 2001). Our sample size is well above this relatively conservative threshold.

Results

Table 1 displays the means and standard deviations for all scales used as well as their respective correlations and internal consistencies. The proactive behaviors show mostly significant correlations; the proactive outcomes show moderate to strong correlations; the socialization outcomes show medium to strong correlations. These correlations confirm the associations within sets of predictors, mediators, and criterion variables respectively. This supports the use of multivariate relative weights analysis, estimating the relative importance of the correlated individual proactive behaviors and mediators on multivariate criteria (LeBreton et al., 2008; see above). This allows interpretation of the results as estimates of the relative importance of each individual predictor despite the intercorrelations within sets of variables.

Insert Table 1 about here

Hypotheses 1a-c proposed that proactive behaviors will be positively related to learning, well-being, and work engagement, respectively. The relevant multivariate relative weights analyses are shown in the first several columns of Table 2. Looking at learning, general socializing predicts approximately 5% (RW = .047) of the variance while relationship building – boss (RW = .022) and role modeling (RW = .020) each predict around 2% of the variance. Interestingly, the relative weights of all the remaining seven proactive behaviors are significant as well.

Well-being and work engagement display different patterns of results. Monitoring explains most variance in well-being (RW = .032) followed by general socializing (RW = .025) and feedback seeking (RW = .021). For work engagement, positive framing is the strongest predictor (RW = .023) followed by reading (RW = .017) and general socializing (RW = .012). Overall, 16% of the variance in learning, 15.7% in well-being, and 10.5% in work engagement can be explained by the ten proactive behaviors. These results support Hypotheses 1a-c.

The results in Table 2 also inform Research Question 1 regarding the relative contribution of proactive behaviors. In fact, the results are rather surprising in showing that almost all of the proactive behaviors directly predict the socialization outcomes. Focusing on the effect sizes of $RW \geq .20$, general socializing is important for predicting learning and well-being; relationship building – boss and role modeling are also stronger predictors for learning; feedback seeking and monitoring are stronger predictors for well-being; and positive framing is the strongest predictor for work engagement.

Insert Table 2 about here

In Hypothesis 2 we proposed that proactive behaviors are each positively associated with the corresponding proactive outcome. The results are shown in Table 3, with both standardized beta weights and univariate relative weights, the latter providing a representation of the relation of each proactive behavior with each proactive outcome accounting for the correlations between the proactive behaviors. The positive beta values along the diagonal from top left to bottom right indicate that each proactive behavior is positively associated with its correspondent proactive outcome. This is also supported by the relative weights. In some cases, other proactive behaviors also contribute to the proactive outcome, but across all analyses the corresponding pairs of proactive behavior and proactive outcome show the strongest relationship. These results support Hypothesis 2, and also provide evidence for the discriminant validity of the proactive behavior and proactive outcome measures.

Insert Table 3 about here

This leads to Hypothesis 3, that proactive outcomes mediate the relationship between proactive behaviors and the socialization outcomes. The final three columns of Table 2 display the proactive behaviors' relative weights once proactive outcomes are included, whereas the original relationships are shown in the preceding columns of Table 2. Even after controlling for

proactive behaviors, all ten proactive outcomes contribute meaningfully to the prediction of learning. In fact, proactive outcomes predict learning ($P^2_{XY} = .268$), well-being ($P^2_{XY} = .247$), and work engagement ($P^2_{XY} = .249$) better than proactive behaviors.

Looking at the relative weights for proactive behaviors directly predicting learning compared to those after controlling for proactive outcomes, eight of the relative weights decrease while two increase suggesting that mediation is occurring. When proactive outcomes are controlled for, only general socializing ($RW = .027$) and role modeling ($RW = .018$) remain as important predictors of learning. Furthermore, the variance explained by these proactive behaviors decreases 29.4% from $P^2_{XY} = .160$ to $P^2_{XY} = .113$. Similarly, the relative weights for well-being and work engagement decrease for most proactive behaviors. For well-being only feedback seeking ($RW = .021$) and monitoring ($RW = .023$) remain significant proactive behaviors, with the explained variance reduced 17.8% from $P^2_{XY} = .157$ to $P^2_{XY} = .129$. For work engagement only positive framing ($RW = .024$) remains significant as a proactive behavior, with the explained variance reducing 10.5% from $P^2_{XY} = .105$ to $P^2_{XY} = .094$. These results provide evidence of a partial mediating role for proactive outcomes on well-being and work engagement. These findings support Hypotheses 3 a-c.

Finally, Research Question 2 asked which proactive behaviors remained important after proactive outcomes were accounted for. Looking at Table 2, general socializing and role modeling are reduced but remain significant in predicting learning. For well-being, feedback seeking and monitoring remain significant. For work engagement, only positive framing remains significant.

Discussion

One of the objectives of this study was to provide a possible answer as to why proactive behaviors have different effects across studies (Ashforth et al., 2007; Gruman et al., 2006; Saks

et al., 2011; Wanberg & Kammeyer-Mueller, 2000). Saks et al. (2011) proposed and confirmed a mediating role for proactive outcomes to resolve these anomalies, and we extend this using a sample of temps who we anticipated would be skilled users of proactive behaviors. Our results contribute to the literature on newcomer proactive behavior and outcomes in several ways.

First, we found that the proactive behaviors not only predict learning which is consistent with previous findings (e.g., Ashforth et al., 2007), but also predict newcomer well-being and work engagement. Second, support was found for the distinction between proactive behaviors and proactive outcomes. Proactive behaviors were consistently related to their corresponding proactive outcomes. This provides support for the measures we developed as part of this research, as well as the validity of the construct of proactive outcomes since the relationships were not as high as to cause multicollinearity concerns (Mason & Perreault, 1991). Rather, the evidence suggests that proactive behaviors and proactive outcomes are distinct but related constructs. However, similar to Saks et al. (2011) we found that some proactive behaviors were associated with non-corresponding proactive outcomes which suggests that proactive behaviors can contribute more broadly beyond their intended effects. For example, feedback seeking positively predicted a range of proactive outcomes such that the more temps sought feedback, as well as receiving this feedback, they also developed networks, built relationships with their boss, and were able to role model others. Thus, proactive behaviors have benefits beyond their immediate scope, whether intended or not.

Third, notwithstanding the broad usefulness of proactive behaviors, proactive outcomes are confirmed as also important. Even after controlling for the influence of proactive behaviors, proactive outcomes explained about 25% of the variance in the three socialization criteria, and thus had almost twice the relationships with successful socialization than the proactive behaviors on their own. Moreover, only some of the proactive behaviors remained meaningful predictors

of socialization outcomes after we controlled for proactive outcomes. This may be the reason for the inconsistent findings of previous studies. That is, if the impact of most proactive behaviors relies on the respective outcome of the behavior, then variations in the apparent effects of proactive behaviors may be due largely to how effective they were in achieving proactive outcomes.

Beyond the direct relationships of proactive behaviors with the socialization outcomes, we also posed two research questions to investigate the relative importance of proactive behaviors both as direct predictors and when the mediating effects of proactive outcomes were considered. These questions were answered using multivariate relative importance analysis (LeBreton & Tonidandel, 2008) which accounts for the correlations within multiple predictors and criteria. The results were similar across the direct and mediated relationships, and we focus here on those proactive behaviors that were relatively more important across both analyses. Specifically, general socializing and role modeling were the strongest predictors of learning; monitoring and feedback seeking were the strongest predictors of well-being; and positive framing was the strongest predictor of work engagement. These results show that in fact different proactive behaviors are relatively more or less important across different socialization criteria, supporting the use of detailed measures of proactive behaviors. Four of these behaviors are within the category “change self” (feedback seeking, positive framing, monitoring, role modeling; Cooper-Thomas & Burke, 2012), suggesting that socialization outcomes are achieved primarily by the individual newcomer changing. Thus, while newcomers may be able in principle to change the organization (Feldman & Brett, 1983), this may be more common for newcomers entering positions with power such as new executives (Conger & Fishel &, 2007). The differentiated pattern of findings across proactive behaviors supports future research using only those proactive behaviors most predictive for the specific criteria of interest, which may

allow for more parsimonious models and shorter questionnaires. As a final point, the results support the benefits of multivariate relative importance analysis as a useful analytic technique for correlated predictors and criteria.

In summary, the results of this study suggest that there are in fact various proactive behaviors that have a positive influence on the socialization of newcomers. However, for most proactive behaviors this relationship depends on the outcome of the behavior rather than on the behavior alone, as well as the specific socialization outcome.

Theoretical and Practical Implications

Theoretically, our results extend the range of proactive behaviors, proactive outcomes, and socialization outcomes investigated. The results provide further support for the role of proactive outcomes alongside proactive behaviors, and suggest a more nuanced view of their respective roles. Our findings are also novel in showing a relationship between newcomer proactivity and work engagement. While Saks and Gruman (2011) found only an indirect relationship between socialization tactics and work engagement, mediated by person-job fit perceptions, emotions, and self-efficacy, our results show that proactive behaviors have a direct relationship with work engagement that is mediated by proactive outcomes. When the mediating effects of proactive outcomes were accounted for, positive framing as a proactive behavior and having positively framed as an outcome were revealed as the main predictors of work engagement.

Practically, organizations need increasingly to integrate large numbers of workers with varying levels of experience and expertise. Encouraging newcomers to be proactive provides a flexible approach for success (Seibert, Crant, & Kraimer, 1999). In this regard, relationship-oriented proactive behaviors appear particularly important, especially general socializing (replicating Saks et al.'s (2011) results), and may be a useful focus for onboarding programs.

From a practical point of view, it is critical that new employees' peers – including colleagues, supervisors, and managers – take the time to socialize with new employees, whether temporary or permanent staff. Colleagues are also important for two particular proactive outcomes. First, colleagues should aim to answer new employees' questions, since direct inquiry is only effective as a proactive behavior for both learning and work engagement when new employees receive relevant answers. Second, supervisors in particular should support new employees in building a relationship with them, since the proactive outcome built-relationship boss predicts both learning and well-being over and above the effects of proactive behaviors, while the relative weight for built-relationship boss in predicting work engagement was also relatively strong though not significant. Hence those in more senior roles to the new employee should allow newcomers to build a relationship with them, and support this in practical ways, such as taking the initiative to invite the newcomer for coffee or introduce them to other colleagues. Finally, the new employee who tries and manages to positively frame also rates themselves higher on the socialization outcomes. Hence positive framing can be an important strategy for new employees, and one that can be implemented regardless of the specific role or work context.

Limitations and Future Research

This research was conducted with temps who were anticipated as being expert proactive socializers. Supporting this, the average mean across proactive behaviors was 3.83, indicating that temps conducted each proactive behavior two or three times each week; equivalent to 20 to 30 proactive behaviors per week for all ten proactive behaviors. While this establishes that these temps reported using proactive behaviors frequently, we have no evidence that this is in fact more proactive than any other type of newcomer. We chose to use a more specific rating scale of proactive behaviors to know how often participants were proactive whereas past research has used either a rating of the extent to which participants are proactive (“to no extent” through “to a

very great extent”) or of general – but not specific – frequency (“very infrequently” through “very frequently”). In fact, across three studies of proactive behavior using either one or both of these scales with samples of MBA graduates, undergraduate interns, and unemployed job seekers respectively, the mean level of proactive behavior is extremely similar (with a range of .06), at slightly above the midpoint (Ashford & Black, 1996; Saks et al., 2011; Wanberg & Kammeyer-Mueller, 2000). Thus we can only suggest that temps are more proactive. It is interesting to note also that temps in this research showed greater variation in their reported patterns of proactive behavior, ranging from 2.62 to 5.23 (range of 2.61) whereas previous studies have shown ranges of 1.08 (Ashford & Black, 1996), 0.99 (Wanberg & Kammeyer-Mueller, 2000), and 1.14 (Saks et al., 2011). This supports, but does not confirm, the idea that temps use proactive behaviors more expertly, or at least selectively, according to the context. Moreover, the proportion of variance explained by proactive behavior and proactive outcomes is slightly greater than in past research (Ashford & Black, 1996; Saks et al., 2011; Wanberg & Kammeyer-Mueller, 2000), which supports the idea that proactivity by temps is effective in attaining socialization outcomes. Further research is warranted and we suggest that future researchers use more specific scales, such as the one we introduced here, so that levels of proactive behaviors can be compared across samples.

Our findings extend the results of Saks et al. (2011) using student interns, confirming the mediating role of proactive outcomes. However, it is plausible that temps will be less invested in by colleagues relative to permanent employees and therefore attain lower levels of proactive outcomes. This may occur especially for “shared” proactive behaviors which require reciprocity from an insider. For example, a temp who uses direct inquiry may receive a response from a colleague that is only sufficient, whereas a permanent newcomer might have received a fuller explanation. That mediation was still found, and the proportion of variance explained of 25% to

27% for proactive outcomes, confirms the important role of proactive outcomes, although stronger relationships might be found for permanent employees. Moreover, although our model including proactive behaviors and proactive outcomes predicts between 34% and 38% of variance in these socialization outcomes, the majority of variance is left unexplained. Hence other factors beyond individual proactive behavior must be important. Past research has investigated both individual factors, such as desire for control and Big 5 personality traits (Ashford & Black, 1996; Wanberg & Kammeyer-Mueller, 2000), and contextual factors such as opportunity for and level of social interaction, which may account for additional variance (Major & Kozlowski, 1997). Of these, we suggest that individual factors are likely to already influence whether and how new employees are proactive, and therefore these are not likely to predict additional variance. Contextual factors may be more useful. Some research has investigated the direct and interactive effects of organizational socialization tactics alongside newcomer proactivity (Gruman et al., 2006; Kim et al., 2005), and this along with supervisor and colleague behaviors seems an area ripe for research. Moreover, further research is needed with other samples of newcomers to explore which proactive behaviors and proactive outcomes are important for socialization success across settings.

Our data were all collected using self-report surveys. In fact, attempts were made to obtain performance ratings from temps' placement organizations but there were insufficient data to analyze. A problem with self-report is the potential risk of common method variance, which may inflate or deflate relationships (Lance, Dawson, Birkelbach, & Hoffman, 2010). In the current research, we used methods to control for relationships between variables (e.g., using different response scales; physically separating similar constructs in the survey, namely proactive behaviors and proactive outcomes; Podsakoff et al., 2003), and therefore it is unlikely that common method variance falsely inflated relationships. Finally, our general socializing scale has

an internal reliability of .69 and hence a greater amount of error. In spite of this, general socializing was a strong predictor of socialization outcomes, predicting 29%, 16%, and 11% of learning, well-being, and engagement when only proactive behaviors were included in the regression analysis, and remaining a significant predictor of learning when proactive outcomes were also entered in the regression. It is plausible that even stronger results for general socializing would be found with an improved, more reliable measure.

Conclusion

In conclusion, the results of this study suggest that newcomers' proactive behaviors are important both for their direct effects, and for their indirect effects via proactive outcomes, in predicting learning, well-being, and work engagement. In addition to demonstrating the importance of newcomer proactivity, we investigated the role of proactive outcomes and found that each proactive behavior has a stronger effect if it is paired with the corresponding proactive outcome. Finally, we compared the relative importance of proactive behaviors and proactive outcomes, finding different proactive behaviors facilitate different criteria of socialization success (i.e., learning, well-being, and work engagement). We suggest a joint responsibility of newcomers to act proactively and of longer-tenured employees to pursue opportunities to support newcomers' proactivity, such as by providing feedback and answering direct inquiries, and more broadly by supporting the development of relationships that help newcomers' integration, assimilation, and adjustment.

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Table 1.
Means, standard deviations and intercorrelations of the scales used.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
Proactive Behaviors																																				
1	Feedback seeking	2.62	1.49	(.89)																																
2	General socializing	2.48	.99	.26	(.69)																															
3	Relationship building-boss	3.62	1.62	.21	.49	(.90)																														
4	Positive framing	5.48	1.12	.09	.28	.35	(.77)																													
5	Reading	4.09	1.45	.13	.45	.31	.43	(.74)																												
6	Monitoring	3.92	1.77	.24	.38	.50	.26	.49	(.88)																											
7	Direct inquiry	5.23	1.25	.35	.20	.14	.30	.34	.31	(.87)																										
8	Networking	3.67	1.42	.31	.51	.52	.32	.46	.46	.12	(.80)																									
9	Role modeling	3.51	1.91	.42	.39	.36	.14	.31	.68	.44	.49	(.90)																								
10	Change work procedures	3.66	1.65	.37	.37	.28	.10	.40	.24	.46	.31	.35	(.81)																							
Proactive Outcomes																																				
11	Received feedback	4.10	1.56	.45	.35	.15	.21	.34	.25	.15	.36	.33	.23	(.90)																						
12	Generally socialized	3.79	1.62	.41	.68	.34	.13	.40	.40	.13	.43	.53	.34	.54	(.90)																					
13	Built relationship-boss	4.42	1.47	.31	.47	.59	.19	.43	.33	.08	.35	.28	.33	.44	.62	(.94)																				
14	Positively framed	5.44	1.04	.07	.28	.16	.44	.34	.10	.12	.23	.03	.04	.33	.33	.47	(.90)																			
15	Had read	4.39	1.33	.31	.34	.12	.02	.55	.31	.28	.26	.30	.43	.37	.54	.43	.43	(.83)																		
16	Monitored	4.66	1.52	.26	.36	.32	.04	.43	.70	.18	.28	.53	.26	.34	.52	.54	.24	.45	(.95)																	
17	Direct inquiries answered	5.41	1.10	.14	.07	-.07	.06	.12	.08	.40	.05	.32	.11	.38	.26	.25	.39	.28	.16	(.87)																
18	Networked	4.72	1.45	.37	.52	.41	.18	.37	.39	.03	.58	.36	.29	.42	.63	.60	.31	.38	.63	-.03	(.86)															
19	Role modeled	3.74	1.50	.41	.32	.27	.00	.36	.55	.30	.26	.70	.29	.57	.63	.49	.25	.53	.69	.35	.49	(.92)														
20	Changed work procedures	4.25	1.53	.31	.35	.18	-.06	.25	.19	.25	.30	.41	.71	.49	.50	.47	.33	.52	.42	.28	.43	.52	(.87)													
Learning																																				
21	Job	6.29	.67	-.08	.06	-.15	.11	.03	-.11	-.04	.04	-.01	-.10	.25	.11	.11	.40	.12	-.01	.35	.04	-.02	.09	(.88)												
22	Relationships	5.90	.77	.11	.45	.16	.11	.27	.17	.04	.21	.26	.18	.34	.49	.44	.34	.30	.36	.28	.38	.39	.28	.35	(.76)											
23	Company	5.22	1.21	.11	.28	.20	-.02	.22	.23	.05	.21	.30	.21	.21	.35	.46	.35	.50	.44	.12	.41	.41	.39	.29	.48	(.91)										
Wellbeing																																				
24	Anxiety-Contentment	1.03	.88	-.19	.14	-.01	.10	.15	-.22	-.13	.05	-.16	.01	.10	.10	.28	.47	.22	-.05	.29	.00	-.06	.14	.31	.22	.17	(.87)									
25	Depression-Enthusiasm	1.21	.83	-.02	.27	.14	.20	.20	-.04	-.08	.22	.00	.01	.25	.24	.35	.62	.29	.04	.29	.19	.16	.23	.32	.37	.27	.64	(.91)								
Engagement																																				
26	Vigor	4.55	1.24	.08	.26	.19	.23	.29	.09	.00	.27	.06	.11	.37	.36	.47	.70	.42	.23	.30	.29	.29	.34	.36	.38	.29	.43	.69	(.87)							
27	Absorption	4.95	1.28	.10	.23	.14	.11	.24	.11	.00	.22	.00	.08	.38	.25	.41	.67	.42	.29	.32	.26	.30	.33	.32	.41	.33	.44	.67	.80	(.70)						
28	Dedication	4.91	1.05	.02	.20	.09	.19	.18	.14	.08	.13	.05	.14	.14	.10	.24	.50	.22	.25	.19	.22	.20	.27	.26	.29	.24	.21	.46	.53	.65	(.88)					
29	Placement duration (days)	87.25	96.97	-.21	-.10	-.08	-.14	-.15	-.14	-.17	-.11	.01	-.06	-.17	-.06	-.09	-.16	-.08	-.02	-.12	-.02	-.04	.04	-.02	.04	.26	-.16	-.16	-.21	-.17	-.05					
30	Age	37.56	12.30	-.24	-.16	-.11	.07	-.13	-.19	-.34	.00	-.30	-.29	-.20	-.29	-.09	.23	-.17	-.21	-.11	-.11	-.30	-.31	.08	-.06	-.08	.12	.10	.21	.21	.08	.03				
31	Gender	.80	.40	-.07	.16	.12	.03	.14	.22	.02	.09	.20	.10	.14	.16	.20	.09	.13	.26	.05	.23	.26	.19	.10	.19	.23	.03	.05	.16	.08	.14	-.08	-.09			

Note. Reliabilities are reported along the diagonal. All correlations equal to or greater than .21 are statistically significant at $p = 0.05$.

Table 2

Multivariate Relative Weights of the Relationships Between Proactive Behaviors, Proactive Outcomes and Socialization Criteria

	Learning		Wellbeing		Engagement		Learning		Wellbeing		Engagement	
	R ²	% R ²										
Proactive Behaviors												
Feedback seeking	.005*	2.9	.021*	13.2	.007*	6.5	.008	2.0	.021*	5.6	.005	1.5
General socializing	.047*	29.1	.025*	15.9	.012*	11.0	.027*	7.1	.015	4.0	.012	3.4
Rel. building – boss	.022*	13.8	.008	4.8	.006	5.7	.014	3.7	.009	2.3	.007	1.9
Positive framing	.014*	8.8	.012*	8.0	.023*	21.6	.007	1.9	.011	2.9	.024*	7.1
Reading	.014*	8.9	.019*	12.2	.017*	16.6	.009	2.4	.008	2.1	.007	2.2
Monitoring	.013*	8.3	.032*	20.4	.009*	8.7	.009	2.2	.023*	6.1	.007	2.1
Direct inquiry	.004*	2.6	.009*	5.5	.005	4.9	.006	1.5	.016	4.2	.005	1.5
Networking	.007*	4.3	.015*	9.7	.011*	10.7	.005	1.2	.010	2.6	.010	2.8
Role modeling	.020*	12.7	.011*	6.8	.009*	8.3	.018*	4.8	.009	2.5	.011	3.2
Changing work procedures	.014*	8.5	.005	3.5	.006	6.1	.010	2.6	.007	1.8	.006	1.7
P ² _{XY}	.160		.157		.105		.113		.129		.094	
Proactive Outcomes												
Received feedback							.022*	5.9	.008	2.2	.025	7.4
Generally socialized							.024*	6.3	.008	2.1	.025	7.2
Built rel. – boss							.028*	7.4	.027*	7.1	.020	5.7
Positively framed							.041*	10.7	.101*	26.9	.096*	28.1
Had read							.041*	10.8	.019*	5.2	.022	6.5
Monitored							.020*	5.2	.012	3.2	.014	4.1
Direct inquiries answered							.033*	8.7	.032*	8.5	.014	4.1
Networked							.017*	4.4	.013	3.4	.010	2.8
Role modeled							.029*	7.6	.018*	4.9	.011	3.3
Changed work procedures							.013	3.4	.009	2.4	.012	3.4
P ² _{XY}							.268		.247		.249	
Total P ² _{XY}							.383		.376		.343	

Note. * $p \leq .05$; % R² is the percentage of variance in R² explained. Rel. building – boss = relationship building – boss; built rel. – boss = built relationship – boss.

Table 3

Regressions of Proactive Behaviors on Proactive Outcomes

	Received feedback		Generally socialized		Built relationship-boss		Positively framed		Had read		Monitored		Direct inquiries answered		Networked		Role modeled		Changed work procedures	
	β	RW	β	RW	β	RW	β	RW	β	RW	β	RW	β	RW	β	RW	β	RW	β	RW
Feedback seeking	.39**	.13*	.23**	.08*	.23**	.05*	.05	.00	.20*	.04*	.11	.02	-.03	.01	.23**	.07	.21**	.08*	-.00	.03*
General socializing	.16	.04	.54**	.25*	.13	.07*	.18	.04	.11	.04*	.12	.04	.03	.00	.24**	.10	.04	.03*	.10	.04*
Relationship building – boss	-.15	.01	-.03	.03	.52**	.19*	-.04	.01	-.10	.01	-.01	.03	-.12	.01	.04	.04	.07	.02*	-.06	.01
Positive framing	.10	.02	-.04	.01	-.07	.01	.33**	.12*	-.24*	.02*	-.18*	.02	-.03	.00	-.03	.01	.18*	.02	-.11	.02
Reading	.24*	.05*	.20*	.05*	.37**	.09*	.22*	.06	.55**	.19*	.23**	.08*	.09	.01	.10	.04	.31**	.06*	-.01	.02*
Monitoring	-.05	.01	-.07	.03*	-.11	.02*	-.11	.01	.04	.03	.60**	.26*	-.25*	.02	.11	.04	.07	.10*	-.11	.01
Direct inquiry	-.15	.01	-.25*	.02	-.22*	.01	.01	.01	.01	.02	-.15*	.01	.36**	.11*	-.21*	.02	.09	.02*	-.13	.02*
Networking	.07	.03	-.11	.04*	-.18*	.02*	.06	.02	-.05	.02	-.20*	.02	-.01	.01	.30**	.13*	.26**	.02*	.04	.02*
Role modeling	.15	.03	.40**	.11*	.08	.02	-.07	.00	.01	.02	.13	.10*	.40**	.07*	-.02	.03	.63**	.25*	.26**	.06*
Changing work procedures	-.04	.01	.00	.03	.06	.03*	-.13	.01	.15	.07*	.04	.02	-.14	.01	.05	.02	.06	.02	.68**	.35*
R ²	.342		.627		.508		.268		.452		.584		.248		.475		.600		.579	

Note. * $p \leq .05$; ** $p \leq .01$.