Social Relationships and Intraindividual Variability in Interpersonal Behavior: Correlates of Interpersonal Spin

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Personality constructs are typically conceptualized as central tendencies of the individual. We explore whether dynamic personality constructs that quantify the within-individual variability of behavior across situations and over time predict the closeness of social relationships. We focused on interpersonal spin, defined as the degree of dispersion in a person's interpersonal behaviors around the interpersonal circumplex across situations and over time. We predicted that individuals with high spin would have social relationships that are less close than individuals with low spin. In 3 studies with different measures of relationship closeness, we found that (a) higher spinners reported that a larger proportion of their contacts in their workplace social networks were distant (Study 1); (b) co-workers were less satisfied and less often engaged in pleasant activities with higher spinners (Study 2); and (c) co-workers avoided higher spinners with whom they were well acquainted (Study 3). Moderated mediation analyses in Study 3 revealed that co-workers avoided well-acquainted higher spinners because they felt more negative affect when interacting with these individuals. The findings suggest the potential of dynamic personality constructs for improving our understanding of the characteristics of individuals' social relationships.

Keywords: interpersonal behavior, spin, intraindividual variability, relationships, affect, social avoidance

Most personality constructs describe central tendencies of the behavior of individuals across events (Allport, 1931; McCrae & Costa, 1995). For instance, agreeable people are friendly often and in a variety of situations, including discussions with significant others, meetings with co-workers, and large group interactions. This approach has provided broad factors to describe individuals that predict criteria such as well-being, close spousal relationships, occupational attainment, and community involvement (Ozer & Benet-Martínez, 2006; B. W. Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007).

Trait psychology has been criticized, however, because behavior exhibits sizeable variability across situations and over time (Fiske & Rice, 1955; Fleeson, 2001; Mischel, 1968). Analyses of reports of multiple daily events reveal that over half of the variability in behavior occurs within the individual, rather than between individuals (Fournier, Moskowitz, & Zuroff, 2008; Miner, Glomb, & Hulin, 2005). Additional research has demonstrated that within-individual variability in behavior is patterned. For example, Mis-

chel and Shoda's (1995) cognitive–affective process system (CAPS) model of personality proposes that individuals exhibit distinctive and regular patterns of *if . . . then . . .* associations between the situation and behavior, so that an individual's behavior changes in a predictable manner when the situation changes. Other researchers have demonstrated that behavior is patterned in terms of regular cycles, such as the weekly cycles that occur in interpersonal behavior (Brown & Moskowitz, 1998).

The extent of within-individual variability may form the basis of meaningful dynamic personality constructs—distinctive and stable personality characteristics that describe regularities in how or how much a person's behavior changes over time (Eid & Diener, 1999; Fleeson, 2001; Fleeson & Noftle, 2008; M. L. Roberts & Nesselroade, 1986). For example, within-person variability in behaviors corresponding to five-factor model traits (e.g., extraverted behavior, conscientious behavior) constitutes stable personality characteristics (Fleeson, 2001).

Some research has examined how dynamic personality constructs predict adjustment. In an early test, Block (1961) found that variability in self-reported behavior across eight different types of relationships was associated with maladjustment. Moreover, Kernis and his colleagues found that within-individual variability in self-esteem predicts criteria such as individuals' proneness to hostility (Kernis, Grannemann, & Barclay, 1989) and reactions to evaluations of their social skills by others (Kernis, Cornell, Sun, Berry, & Harlow, 1993). Little is known, however, about how dynamic personality constructs relate to characteristics of individuals' social relationships. Research is needed to ascertain whether dynamic constructs could complement extant personality constructs as useful predictors. In the present report, we explore the potential utility of one dynamic personality construct, interpersonal spin, as a predictor of the closeness of social relationships.

Interpersonal Spin

Interpersonal spin is defined as the extent of dispersion in a person's interpersonal behaviors across social situations and over time (Moskowitz & Zuroff, 2004). Individuals with high spin (high spinners) vary their interpersonal behavior extensively, and those with low spin (low spinners) tend to engage in similar behaviors across situations and over time. In past research, specific dimensions of behavior have been sampled from the domain described by the interpersonal circumplex model (Kiesler, 1983; Wiggins, 1991). In this model, interpersonal behavior is organized around a circle defined by two orthogonal dimensions. The dimension of agency reflects behavior that asserts status relative to others and ranges from submissive to dominant behavior. The dimension of communion reflects behavior that promotes interpersonal ties and ranges from quarrelsome to agreeable behavior. These dimensions of behavior were chosen as the basis for conceptualizing spin because they describe the domain of interpersonal behavior comprehensively and parsimoniously, in both healthy individuals and psychotherapy patients, and in both Western and non-Western societies (Lorr & McNair, 1965; Wiggins, 1979).

Interpersonal spin is illustrated in Figure 1. The person portrayed on the left exhibits high spin. The behavior of this person varies extensively across interpersonal interactions; the person is dominant and agreeable in the first interaction, dominant and quarrelsome in the second interaction, and submissive and agreeable in the third interaction. For example, this person might start the day by giving information to help a co-worker; then this person might criticize the co-worker's performance; and finally this person might become submissive to repair the relationship (Moskowitz, 2009). The person portrayed on the right exhibits low spin. The behavior of this person is relatively stable across interpersonal interactions; the person is mostly dominant and agreeable across all three of the interactions. For example, this person might frequently offer suggestions to provide co-workers with useful information over the course of an entire day.

The specific pattern of within-individual variability that occurs in spin concerns the dispersion of behavior. Spin is stable from one discrete time period to another time period. For example, in past research, spin scores calculated based on scores from 1 week were similar to spin scores based on another week (Cronbach's alphas

exceeding .80; Moskowitz & Zuroff, 2004, 2005). Thus, theoretically, observers could predict how much a person's behavior would vary during a certain time period. Individuals may be able to predict, for instance, that a high spin co-worker will show a wider dispersion in behavior throughout the day than a low spin co-worker.

While the extent of dispersion is stable across time, it is not necessarily the case that all individuals with a particular level of spin show the same patterning of behavior or that the same individual shows the same patterning across different periods of time. A high spin individual could show behaviors a, b, and c on a given day, and behaviors x, y, and z on the next day, even though the extent of dispersion is similar on both days. Several lines of evidence suggest a temporally stable yet difficult to predict quality in the behavior of individuals with high spin. The behavior of individuals with higher spin does not complement the behavior of their interaction partners (Erickson, Newman, & Pincus, 2009). Spin is not correlated with several indices of the variability in the situation, namely, variability in the gender of interaction partners, variability in hierarchical social role status, and the total number of different partners over a 20-day period (Moskowitz & Zuroff, 2004). Individuals diagnosed with borderline personality disorder exhibit higher spin than controls (Russell, Moskowitz, Zuroff, Sookman, & Paris, 2007). The dispersion in behavior that characterizes spin may have a biological basis, evidenced by the finding that tryptophan supplementation decreased spin in a double-blind cross-over study (Moskowitz, Zuroff, aan het Rot, & Young, 2011). Spin may also result from lacking a strong sense of self to guide behavior (Baird, Le, & Lucas, 2006; Block, 1961). Thus, although observers may be able to predict that an individual with high spin will vary their behavior frequently, they should have difficulty anticipating the specific nature of this dispersion.

Interpersonal spin is conceptually distinct from extant personality variables such as self-monitoring, impulsivity, and Neuroticism, in that it focuses on the individual's range of interpersonal behavior rather than the intensity, appropriateness, or congruency of behavior. Spin reflects variability in what people do. In contrast, impulsivity is a multidimensional construct of which only one component, taking risky actions, refers to behavior; the other two components refer to attention (e.g., easily getting bored) and
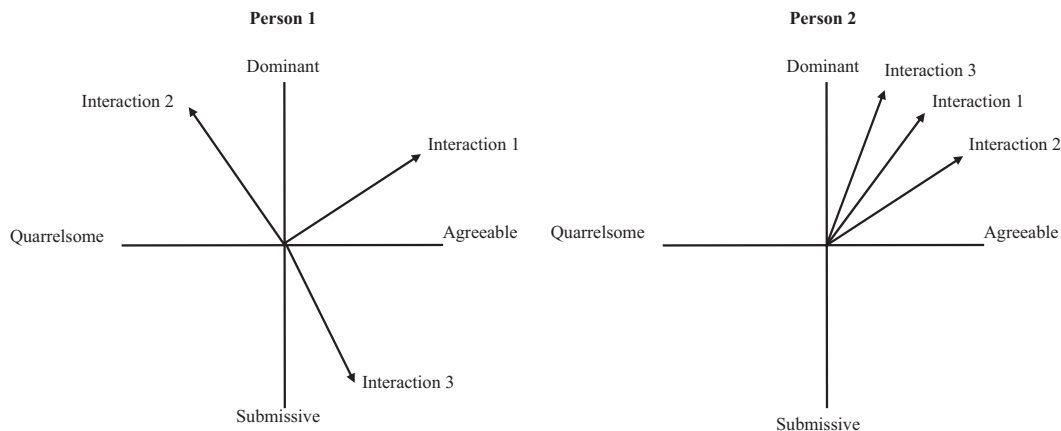

Figure 1.   Graphical depiction of high spin (left panel) and low spin (right panel).

cognition (e.g., lack of planning; Patton, Stanford, & Barratt, 2006). Similarly, self-monitoring is not specifically focused on behavior; it is composed of two dimensions of which one reflects skill in public performance and the other reflects the motivation to engage in impression management (Gangestad & Snyder, 1991; John, Cheek, & Klohnen, 1996). While some researchers have used the term inconsistency to refer to the incongruency between externally visible and internal states reflected in the latter dimension (Nowack & Kammer, 1987; Wolf, Spinath, Riemann, & Angleitner, 2009), the phenomenon is distinct from inconsistency in a person's behaviors across situations and over time that characterizes spin. Neuroticism is primarily a measure of how people feel. In addition, while Neuroticism is generally believed to assess both the mean level of negative affect and variability in negative affect, it does not provide a pure measure of the extent of variability in a person's negative affect.

The distinctiveness of spin is supported by past research that found that spin exhibited small to moderate correlations, using Cohen's (1988) standards, with Neuroticism (rs = .34 to .44), Extraversion (rs = −.19 to −.24), and Agreeableness (rs = −.33 to −.37; Moskowitz & Zuroff, 2004, 2005). In addition, spin has been found to be uncorrelated with questionnaire measures of impulsivity in two distinct samples (aan het Rot, Moskowitz, & Young, 2011).

Interpersonal Spin and the Closeness of Social Relationships

We build on and extend past research on spin by testing whether spin predicts the closeness of relationships relevant to the workplace. We propose that spin is associated with social relationships that are less close because observers feel negative affect when interacting with individuals with high spin.

There are several possible reasons why interacting with high spinners might elicit negative affect. One reason is that it may be challenging to create mental models of individuals with high spin. People are motivated to build accurate mental representations of others so that they can accurately predict their behavior in future interactions (Devine, Sedikides, & Fuhrman, 1989). Individuals with high dispersion of behavior may thwart others' attempts to build accurate mental models of them. In addition, it may be difficult to entrain one's behavior to that of individuals with high spin. Choosing how to act with high spinners should be difficult, as individuals must frequently adjust their own behavior in response to the shifting behaviors of high spinners. Moreover, individuals with high spin may frustrate the motive of others to complement their behaviors and obtain favorable outcomes associated with complementarity, such as liking, trust, and coordinated performance (Maddux, Mullen, & Galinsky, 2008; Tiedens & Fragale, 2003). Interacting with high spinners should thereby elicit negative affect that, in turn, should lead to less close social relationships with high spinners.

Spin and Adaptation to Social Demands: Alternative Perspectives

There is a line of theory and evidence that suggests that within-person variability may benefit social relationships. According to a functional flexibility argument (Paulhus & Martin, 1988), individuals need to vary their behaviors over time and across situations to adapt to the varying circumstances that they encounter. Without such flexibility, individuals fail to capitalize on the variety of opportunities that they encounter, leading to less favorable outcomes. Similarly, theories of excessive rigidity propose that exclusive reliance on a few styles of behavior prevents individuals from engaging in the most appropriate behaviors in given situations (Leary, 1957). While the dissociation of spin from complementary patterns in behaviors toward partners (Erickson et al., 2009) and the absence of association with variability in the situation (Moskowitz & Zuroff, 2004) favor the perspective that spin is dysfunctional, we also considered the functional flexibility alternative that individuals with higher spin may have social relationships that are closer than individuals with low spin.

We also examined a third possibility that there is a curvilinear association in the form of an inverted-U between spin and the closeness of relationships. Low spin may reflect an absence of flexibility and impede the development of close relationships, and more spin could increase the closeness of social relationships. Beyond a certain level, however, spin may become detrimental to relationships. To examine this possibility, we tested curvilinear associations in the present set of studies.

The Present Investigation

We tested the general proposition that high spin is associated with social relationships that are less close than low spin in three studies with adult samples. We varied the indicator of the closeness of social relationships across the studies. Specifically, we examined how spin is associated with the proportion of social network ties that are distant (Study 1), co-workers' ratings of dyadic adjustment with participants (Study 2), and co-workers' avoidance of participants (Study 3). In Study 3, we examined the mechanism that spin undermines social relationships because others feel negative affect when interacting with high spinners. As it may take time for spin to influence relationships with others, in Study 3, we also tested whether the associations of spin with co-worker negative affect and co-worker social avoidance become more pronounced as acquaintance increases. Throughout this investigation, we controlled for variables associated with alternative explanations of the results: the traits of Agreeableness, Extraversion, and Neuroticism; the demographic characteristics of gender and age; aspects of the variability among the situations encountered; and mean levels of communion and agency, which are the dimensions of interpersonal behavior used in the calculation of spin.

Study 1: Spin Predicts the Proportion of Distant Ties Within Social Networks

We first examined how spin is related to the proportion of distant ties within social networks. A social network is a set of relationships that enhance a person's ability to accomplish tasks, get ahead, and develop personally and professionally (Sparrowe, Liden, Wayne, & Kraimer, 2001). One of the main dimensions of social networks is the strength of the ties that comprise the networks (Granovetter, 1973; Seibert, Kraimer, & Liden, 2001). Close ties are trusted and reliable, satisfy affiliation needs, and help garner support and contributions, but they provide less novel

information and are more costly to maintain in terms of time and effort (Seibert et al., 2001). Distant ties provide unique information, connect a person to new individuals and groups, and are less costly to maintain, but they are less trusted and less reliable. Individuals with high spin, who, we have theorized, have less close relationships, should rate more of the ties within their social networks as distant than individuals with low spin (Hypothesis 1).

Method

Participants. Individuals in Toronto and Montréal, Canada, holding paid employment were recruited to take part in a study of social interaction using advertisements in newspapers. To be enrolled in the study, participants had to have a job at which they had been employed for at least 6 months and were working at least 30 hr per week. We obtained complete data for 82 individuals (43 men and 39 women). Participants ranged in age between 22 and 70 years old, with an average of 40 years old. They held a variety of occupations (e.g., engineer, data analyst, and secretary). The participants comprise a subsample of a sample previously used to study how individuals perceive others' interpersonal behaviors (Moskowitz & Zuroff, 2005) and how attachment style influences the relation between interpersonal perceptions and affect (Sadikaj, Moskowitz, & Zuroff, 2011).

Procedure. Participants first attended a meeting during which they were informed of their responsibility to complete event-contingent recording forms to monitor their social interactions every day for 20 days. They were asked to complete a form as soon as possible after each social interaction of at least 5 min in duration, up to 10 per day. Participants were told that if they had more than 10 interactions of at least 5 min per day to distribute the completion of forms evenly throughout the day. We chose this type of sampling because it allowed us to capture as many social interactions as possible. Alternatives such as random sampling (i.e., participants completing forms at random times during the day) did not fit our purposes because the timing of the random signals often does not correspond to that of the interactions (Wheeler & Reis, 1991). Participants were asked to mail each day's forms on the day following their completion.

Participants also completed a battery of questionnaires that included the social network assessment; measures of Agreeableness, Extraversion, and Neuroticism; and demographic information. Participants completed an average of 132 forms, or approximately seven forms per day. After the 20-day period, participants were given $150 compensation.

Measures. Descriptive statistics, reliability estimates, and correlations appear in Table 1.

Interpersonal spin. The event-contingent recording forms requested information about the four behavior scales that comprise the interpersonal circumplex: agreeableness, quarrelsomeness, dominance, and submissiveness (Kiesler, 1983; Wiggins, 1991). On each form, participants checked the behavior items they had engaged in during the interaction being recorded.

We used items derived from past research to assess interpersonal behavior (Moskowitz, 1994). There were a total of 12 items for each of the four scales. One item ("I criticized the other") was used for both the dominant and the quarrelsome behavior scales, and another item ("I went along with the other") was used for both the submissive and the agreeable behavior scales. Other examples of items were "I smiled and laughed with others" (agreeableness), "I made a sarcastic comment" (quarrelsomeness), "I asked the other to do something" (dominance), and "I gave in" (submissiveness).

Previous work had indicated that when participants are asked to complete the same form every day, they quickly adopt response sets. Therefore, four different versions of the form were used. Participants were given Form 1 on Day 1 to complete for all interactions on that day, Form 2 on Day 2, Form 3 on Day 3, Form 4 on Day 4, and the rotation was repeated for the 20 days of the study. The 12 items for each dimension of behavior (dominance, agreeableness, submissiveness, and quarrelsomeness) were divided equally among the four forms; thus, there were three items per dimension of behavior per form.

Past research has presented considerable evidence for the convergent and discriminant validity of the event-contingent recording method used to measure interpersonal behavior (Moskowitz, 1994). This research has shown that the scales produce scores that

Table 1
Means, Standard Deviations, Reliabilities, and Correlations (Study 1)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	0.48	0.50	—											
2. Age	39.84	11.47	−.03	—										
3. Agreeableness	3.99	0.50	.28**	.01	(.77)									
4. Extraversion	3.24	0.59	.10	−.05	.25*	(.79)								
5. Neuroticism	2.20	0.65	−.00	−.02	−.25*	−.43***	(.83)							
6. Number of interaction partners	44.37	22.65	.09	.20	.06	.19	.12	—						
7. Variability in gender of partner	0.48	0.04	−.15	.07	−.18	.20	−.08	.21	—					
8. Variability in hierarchical role	0.46	0.20	−.23*	.07	−.05	.06	−.05	.13	.16	—				
9. Mean communion	0.32	0.11	.07	.30**	.31**	.36**	−.05	.19	−.00	.14	—			
10. Mean agency	0.17	0.11	−.05	−.04	.27*	−.26*	.13	.03	.25*	.05	—			
11. Spin	0.96	0.21	−.07	−.36***	−.28**	−.32**	.20	−.11	.06	−.20	−.68***	−.53***	(.86)	
12. Proportion of distant contacts	0.09	0.12	−.18	−.09	.08	.01	−.04	−.01	.04	.03	−.09	−.08	.25*	—

Note. n = 81–82. Gender was coded as 1 = female and 0 = male. Values in parentheses along the diagonal are reliability coefficients. The reliability of spin was calculated using Cronbach's alpha with scores calculated for the first, second, and third weeks of the study.
* p < .05.   ** p < .01.   *** p < .001.

are internally consistent and reliable across time. The pattern of correlations between the scales corresponds to structural predictions based on the interpersonal circumplex. The scale scores converge with a traditional one-time, self-report measure of the behavior scales. Theoretically predicted changes in scale scores in response to different situations have been found (Moskowitz, 1994; Moskowitz, Suh, & Desaulniers, 1994). An overview of reliability and validity evidence for the procedures can be found in Moskowitz and Sadikaj (in press).

We calculated spin using the following procedures and formulas from past research (Moskowitz & Zuroff, 2004). First, for each participant, we calculated a raw score for each behavior scale for each event by calculating the number of items (between zero and three) endorsed for each behavior scale within each event. Then, for each interaction, we calculated a score for agency by subtracting the submissiveness score from the dominance score and a score for communion by subtracting the quarrelsomeness score from the agreeableness score. We treated communion and agency scores for each interaction as Cartesian coordinates (x, y) and then transformed them to polar coordinates (r, θ) (see Figure 2). Spin was the standard deviation of the values of θ, expressed in radians and calculated based on Mardia's (1972) formulas for the circular standard deviation (for a description of the formulas, see Moskowitz & Zuroff, 2004, p. 885). Spin scores varied from 0.54 to 1.45 ($M = 0.96$, $SD = 0.21$). These descriptive statistics are similar to those in past research (Moskowitz & Zuroff, 2004, 2005). Cronbach's alpha applied to spin scores computed within the first, second, and third weeks of the study was .86, revealing high temporal stability, as in past research (Moskowitz & Zuroff, 2004, 2005).

Proportion of distant ties in the social network. We adapted an existing measure of the strength of ties within a person's social network (Seibert et al., 2001). On a standard form, participants listed by initials all the people who had acted to help their career, for example, by speaking on their behalf and providing them with career opportunities, or with whom they had spoken regarding difficulties at work, alternative job opportunities, or long-term career goals. Participants then rated their relationship with each tie on a scale of 0 (*distant*), 1 (*less close*), or 2 (*especially close*). Although the ties were formed prior to the study, participants were
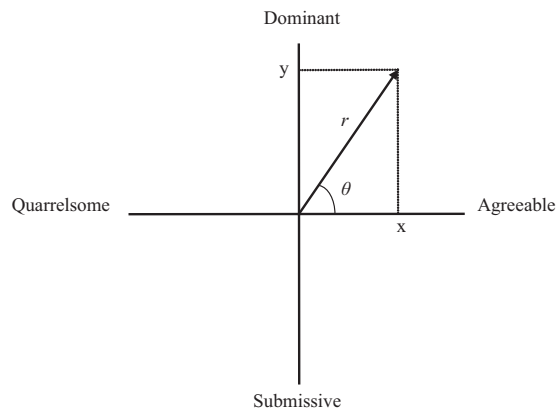
asked to rate their relationships at the time that the study occurred. Participants listed an average of 8.58 ties ($SD = 3.30$). The proportion of ties rated as distant ranged from 0% to 50%.

Control variables. To rule out potential alternative explanations of the findings, we covaried several variables in the analyses. We controlled for the personality traits of Agreeableness, Extraversion, and Neuroticism, because they are correlated with interpersonal spin (Moskowitz & Zuroff, 2004, 2005), and characteristics of social relationships (Ozer & Benet-Martínez, 2006; B. W. Roberts et al., 2007; Shaver & Brennan, 1992). We measured these traits with the NEO Five-Factor Inventory (NEO–FFI; Costa & McCrae, 1992).

We controlled three aspects of situational variability. People may vary their behaviors across events as a result of encountering highly diverse situations. In addition, people who encounter many different situations may develop relationships that are less close, because they invest less effort and time in developing each relationship. Thus, there is a possibility that situational variability produces a spurious association between spin and the closeness of social relationships. We constructed three measures of situational variability. Variability in status was calculated by assigning each event a value corresponding to the hierarchical role of the participant that was reported on each form (1 = supervisee, 2 = co-worker, and 3 = supervisor) and computing the standard deviation in hierarchical roles across all events over 20 days. Variability in the gender of interaction partners was calculated by assigning each event a value corresponding to the gender of the interaction partner (1 = male and 2 = female) and computing the standard deviation of these values across all events over 20 days. We also used a count of the total number of partners with whom each participant interacted across all events over 20 days.

Past research has shown that indices of intraindividual variability can correlate with mean levels of the components used in the calculation of variability (Baird et al., 2006). Consequently, mean levels may produce spurious associations between indices of intraindividual variability and criteria. To verify that this was not the case, we controlled for mean levels of communion and agency across the entire duration of the event-contingent recording procedure. Communal and agentic behavior scores were calculated for each event across the 20 days. Communal behavior scores were calculated for each event by subtracting quarrelsome behavior scores from agreeable behavior scores, and agentic behavior scores were calculated by subtracting submissive behavior scores from dominant behavior scores. Then, we created scores for each participant by averaging communion scores and agency scores across all events for each participant.

Finally, we controlled for gender and age to verify that they did not cause a spurious association between spin and the closeness of social relationships.

Results

Consistent with past research (Moskowitz & Zuroff, 2004, 2005), spin was negatively correlated with Agreeableness and Extraversion (see Table 1). Also as in past research (Moskowitz & Zuroff, 2004), spin was not significantly correlated with the aspects of situational variability examined: number of different partners encountered, variability in gender of the partner, and variability in status in the situation.

Figure 2. Graphical depiction of Cartesian coordinates (x, y) and polar coordinates (r, θ) within the interpersonal circumplex.

As expected, spin was positively correlated with the proportion of ties rated as distant. Regression analysis further demonstrated that spin was associated with the proportion of distant ties within a person's social network independently of other individual differences, including communal and agentic tendencies, and the indices of situation variability (see the first two columns of Table 2). Thus, Hypothesis 1 was supported.

Subsidiary analysis of curvilinear association. We regressed the proportion of distant network ties on the spin score and the square of the spin score to test for a curvilinear association (Cohen, Cohen, West, & Aiken, 2003). The square of the spin score was not related to the proportion of distant network ties (β = 1.24, p = .19).

Discussion

The results of Study 1 show for the first time that interpersonal spin is negatively associated with an indicator of the closeness of social relationships. As spin increased, individuals rated a larger proportion of their network ties as distant. The results do not support the alternatives that spin helps individuals to develop better relationships by promoting their flexibility or that spin becomes debilitating only beyond a certain level.

We did not directly examine the direction of causality in Study 1, and it is possible that having many distant network ties caused people to exhibit more variability in their interpersonal behavior. Undermining the plausibility of this alternative is the high temporal stability of spin in Study 1 and in past research (Moskowitz & Zuroff, 2004, 2005), which suggests that interpersonal spin may not easily change over time.

Another limitation of Study 1 is that focal participants rated the closeness of their relationships. It is possible that high spinners have biased perceptions that the relationships in their networks are distant but that these perceptions are not rooted in reality. To address this issue, in Study 2, we examined how spin is associated with an indicator of the closeness of relationships from the perspective of a co-worker.

Study 2: Spin Predicts Dyadic Adjustment Rated by Co-Workers

We extended the findings of Study 1 by examining how co-workers evaluate their relationships with individuals with high spin. If high spin is associated with social relationships that are less close, then this should be reflected in focal participants' interaction partners' evaluations of their relationships. In Study 2, we focused on dyadic adjustment, an indicator of the closeness of relationships reflecting satisfaction, cohesion, and consensus (Spanier, 1976). We predicted that co-workers would evaluate their relationships with high spinners as less well-adjusted than their relationships with low spinners (Hypothesis 2).

Method

Participants. The procedure for recruiting participants was identical to that in Study 1, except that all participants were recruited from the community in Montréal, Canada, and they had to have a consistent set of co-workers whom they saw at least once a day at work. During recruitment, we informed callers that they would be asked to provide the contact information of a co-worker for researchers to contact them and, upon consent, mail them a package of questionnaires. We obtained complete data (including co-worker ratings) for 89 participants (51 women and 38 men). The age range was 20 to 69 years old, and the average age was 35 years old. Participants held a variety of occupations (e.g., engineer, teacher, data analyst, and secretary). Results for this sample concerning behavior, affect, and vulnerability markers for depression (Zuroff, Moskowitz, & Côté, 1999) and how traits predict patterns of association between behavior and affect (Côté & Moskowitz, 1998) have previously been reported.

Procedure. Participants first attended a meeting during which the procedures were explained. After instructions for the event-contingent recording part of the study were provided, participants completed a battery of questionnaires that included a measure of five-factor model traits and demographic questions that we con-

Table 2
Summary of Regression Results (Studies 1 and 2)

Variable	Study 1: Proportion of distant contacts (rated by self)		Study 2: Dyadic adjustment (rated by co-workers)	
	B	β	*B*	β
Gender	−0.05	−0.20	−0.09	−0.08
Age	0.00	0.05	−0.01	−0.12
Agreeableness	0.05	0.20	0.24*	0.26*
Extraversion	0.00	0.01	0.05	0.04
Neuroticism	−0.01	−0.04	−0.04	−0.05
Number of interaction partners	−0.00	−0.02	−0.01*	−0.27*
Variability in gender of partner	−0.03	−0.01	1.37	0.11
Variability in hierarchical role	0.02	0.03	−0.21	−0.06
Mean communion	0.25	0.23	−0.16	−0.04
Mean agency	0.22	0.22	−0.57	−0.10
Spin	0.35**	0.61**	−1.07*	−0.41*

Note. Gender was coded as 1 = female and 0 = male. All variables were entered simultaneously in the regression.
* $p < .05$. ** $p < .01$.

trolled in the analyses. They also provided the name and phone number of a co-worker. Participants completed an average of 125 forms, about six forms per day. After the 20-day testing period, they were given $100 compensation.

After the participants completed the study, we contacted the co-workers and mailed them a package of questionnaires that included the measure of dyadic adjustment. Co-workers were offered $10 for their participation.

Measures. Descriptive statistics, reliabilities, and correlations are displayed in Table 3.

Interpersonal spin. Interpersonal spin was calculated using the same procedures and formulas as in Study 1 and past research (Moskowitz & Zuroff, 2004, 2005). Spin scores varied from 0.45 to 1.72 ($M = 0.99$, $SD = 0.22$). The temporal stability of spin scores over the 3 weeks of the study was again high ($\alpha = .91$).

Dyadic adjustment. Co-workers completed a measure consisting of the nine satisfaction and cohesion items from the Dyadic Adjustment Scale (Spanier, 1976). The satisfaction items included "Do you confide in this person?" and "How often do you and this person quarrel?" (reverse-scored) and were rated on a scale of 1 (*never*) to 6 (*all the time*). The cohesion items followed the stem "How often would you say the following events occur between you and this person?" Two items were "Laugh together" and "Have a stimulating exchange of ideas." The cohesion items were rated on a scale of 1 (*never*) to 6 (*more often*). We averaged the satisfaction and cohesion items to form a composite score.

Control variables. As in Study 1, we controlled the traits of Agreeableness, Extraversion, and Neuroticism assessed with the NEO–FFI (Costa & McCrae, 1992); gender; age; within-person variability in status; within-person variability in the gender of interaction partners; within-person total number of partners; and mean levels of communion and agency, calculated as in Study 1.

Results

Spin was positively correlated with Neuroticism and negatively correlated with Agreeableness (see Table 3). As in past research (Moskowitz & Zuroff, 2004) and Study 1, spin was not correlated with aspects of situational variability.

As expected, spin was negatively correlated with co-worker ratings of dyadic adjustment. Furthermore, the regression results reported in the last two columns of Table 2 show that the negative association of spin with co-worker ratings of dyadic adjustment remained significant, even after controlling for demographic characteristics, personality traits, aspects of situational variability, and mean levels of communion and agency. Thus, Hypothesis 2 was supported.

Subsidiary analysis of curvilinear association. We examined the quadratic relation between spin and dyadic adjustment by regressing dyadic adjustment on spin and the square of spin (Cohen et al., 2003). The square of spin was not related to co-worker ratings of dyadic adjustment ($\beta = -0.78$, $p = .16$).

Discussion

These findings are consistent with the results of Study 1 in demonstrating that individuals with higher spin have social relationships that are less close than individuals with lower spin. The results of Study 2 indicate that the findings were not unique to the indicator of the closeness of social relationships used in Study 1. Moreover, the results of Study 2 undermine the alternative explanation of Study 1 that individuals with high spin have biased perceptions of their social environment that are not rooted in reality. If this were the case, we would not have found an association between spin and co-worker ratings of dyadic adjustment in Study 2.

An alternative explanation of the results in Study 2 is that individuals with high and low spin have relationships that are equally close, but high spinners nominated co-workers with whom they had less close relationships. However, spin was not correlated with several characteristics of the co-workers, such as age and gender and how much time focal participants and co-workers spent interacting per week (rs = –.03 to .08, ps > .4). While we cannot completely rule out the possibility that the co-workers were different on some characteristic as a function of spin, co-workers of participants with higher and lower spin were similar with respect to two major demographic variables and weekly interaction time spent together. These findings suggest that level of spin did not

Table 3
Means, Standard Deviations, Reliabilities, and Correlations (Study 2)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	0.57	0.50	—											
2. Age	35.03	10.37	.01	—										
3. Agreeableness	2.56	0.61	.16	.45***	(.78)									
4. Extraversion	2.46	0.43	.20	.07	.14	(.64)								
5. Neuroticism	1.82	0.72	.10	−.44***	−.38***	−.40***	(.84)							
6. Number of interaction partners	38.45	18.37	.04	.38***	.12	.08	.00	—						
7. Variability in gender of partner	0.47	0.04	−.07	−.02	−.22*	−.00	−.05	.10	—					
8. Variability in hierarchical role	0.43	0.16	.00	.18	.14	.12	−.12	.19	.10	—				
9. Mean communion	0.32	0.12	−.06	.41***	.38***	.23*	−.34***	.21*	−.05	.07	—			
10. Mean agency	0.15	0.10	−.14	.23*	.06	.05	−.21*	.09	.11	.05	.18	—		
11. Spin	0.99	0.22	.02	−.42***	−.38***	−.15	.40***	−.18	.15	−.05	−.75***	−.51***	(.91)	
12. Dyadic adjustment	4.14	0.56	−.04	.04	.29**	.09	−.24*	−.23*	−.05	−.06	.27*	.10	−.34**	(.66)

Note. $n = 89$. Gender was coded as 1 = female and 0 = male. Values in parentheses along the diagonal are reliability coefficients. The reliability of spin was calculated using Cronbach's alpha with scores calculated for the first, second, and third weeks of the study.
* $p < .05$.   ** $p < .01$.   *** $p < .001$.

systematically influence the selection of co-workers who were nominated to participate in the study.

Study 3: Spin Predicts the Negative Affect and Social Avoidance of Co-Workers

Study 3 was designed to extend the understanding of how spin relates to the closeness of social relationships. We used indicators that provided further information about how others react to high spinners. Specifically, we examined whether others avoid interactions with individuals with high spin more and whether others experience more negative affect when interacting with individuals with high spin.

We also considered the possibility that the association between spin and others' social avoidance depends on acquaintance, the duration of time focal participants have interacted with others. At the outset, we suggested that spin should elicit negative affect, and this negative affect should lead individuals to avoid high spinners, leading to a deterioration of high spinners' social relationships. It may take time for others to feel negative affect, because others have to learn that it is difficult to anticipate high spinners' behavior. According to models of person perception, people initially rely on stereotypic judgments and implicit inferences to assess others' personality (Albright, Kenny, & Malloy, 1988; Weiss, 1979). With greater experience with the person, perceivers' judgments become more valid, that is, more highly correlated with self-ratings (Colvin & Funder, 1991; Funder & Colvin, 1988; Paulhus & Bruce, 1992). This is particularly the case for traits that are not readily observable, because it takes more time for perceivers to accumulate information about these traits (Paunonen, 1989). Spin is likely not readily observable because, by definition, it manifests across situations and over time. Thus, it should take time for observers to feel negative affect when interacting with high spinners and to avoid interactions with them. We predicted that positive associations of spin with others' social avoidance and others' negative affect would become more pronounced as acquaintance increased (Hypotheses 3 and 4).

In Study 3, we also examined the mechanism by which high spin is associated with relationships that are less close. As previously noted, others may feel more negative affect and, in turn, engage in more social avoidance when interacting with high spinners, primarily after some period of acquaintance. We combined these proposed effects in a moderated mediation model of acquaintance, spin, others' negative affect, and others' social avoidance. Moderated mediation occurs when a mediated relationship depends on the level of a moderating variable (James & Brett, 1984; Muller, Judd, & Yzerbyt, 2005). In our moderated mediation model, others' negative affect will mediate the association between spin and others' social avoidance, and the strength of this mediated relation will vary depending on acquaintance. We expected a mediated relation between spin and others' social avoidance through others' negative affect among co-workers who are well-acquainted but not among co-workers who are briefly acquainted (Hypothesis 5).

Method

Participants. The procedure for recruiting focal participants was similar to that in Studies 1 and 2. Participants were recruited from the community in Montréal, Canada. As in Study 2, focal participants had to have a consistent set of co-workers. During recruitment, we informed callers that they would be asked to provide the contact information of two co-workers for researchers to contact them and, upon consent, send them a questionnaire. Participants in Study 3 were recruited as couples for the purposes of a separate investigation. Intraclass correlations (ICCs) revealed no significant nonindependence within couples on co-worker negative affect (ICC = –.04, p = .63) or co-worker social avoidance (ICC = –.07, p = .70). Therefore, we did not take into account the nesting of focal participants within couples in the analyses.

We obtained complete self-report data for 196 focal participants (99 women and 97 men). The age range was 18 to 54 years old, and the average age was 29 years old. Focal participants again held a variety of occupations (e.g., software developer, office clerk, and engineer). We obtained data from 114 co-workers (66 women and 48 men). The age range was 20 to 53 years old, and the average age was 30 years old. Similar to the focal participants, co-workers held a variety of occupations. We obtained at least one co-worker survey for 85 focal participants. Specifically, 56 participants had one co-worker responding, and 29 participants had two co-workers responding.

Procedure. Focal participants first attended a meeting during which the event-contingent recording procedure used in Studies 1 and 2 was explained. After these instructions, focal participants completed a battery of questionnaires that included the measures of Agreeableness, Extraversion, and Neuroticism and demographic questions. They also provided the names, phone numbers, and e-mail addresses of two co-workers, as well as permission to contact them to invite them to participate in the study. Focal participants completed an average of 126 forms, about six forms per day. After the 20-day testing period, they were given $160 compensation.

After focal participants completed the study, we contacted co-workers by phone or e-mail to invite them to participate. We then e-mailed co-workers the link to the surveys that included the measures of negative affect when interacting with focal participants and social avoidance of focal participants. Co-workers were mailed a $15 check after they had completed the surveys.

Measures. Descriptive statistics, reliabilities, and correlations appear in Table 4.

Interpersonal spin. Interpersonal spin was calculated using the same procedures and formulas as in Studies 1 and 2. Spin scores varied from 0.48 to 1.93 (M = 1.04, SD = 0.26). The temporal stability of spin scores over the 3 weeks of the study was high (α = .89).

Co-worker negative affect. Co-workers indicated the extent to which they felt nine emotions when interacting with focal participants on a scale of 1 (*not at all*) to 5 (*extremely*). We used eight items from the Job Affect Scale (Brief, Burke, George, Robinson, & Webster, 1988; Burke, Brief, George, Roberson, & Webster, 1989): four high negative affect items (distressed, scornful, hostile, and fearful) and four reverse-scored low negative affect items (calm, relaxed, at rest, and placid). The Job Affect Scale has been used extensively in past research on affect in groups and organizations (Brief & Roberson, 1989; Saavedra & Earley, 1991; Saavedra & Kwun, 2000). To increase coverage of the affect domain, we added one item: angry.

Co-worker social avoidance. Co-workers rated the degree to which they avoided the focal participant over the past month on

Table 4
Means, Standard Deviations, Reliabilities, and Correlations (Study 3)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender	0.58	0.50	—													
2. Age	29.94	6.98	−.11	—												
3. Agreeableness	3.63	0.40	.10	−.13	(.59)											
4. Extraversion	3.46	0.46	−.04	−.09	.13	(.71)										
5. Neuroticism	2.76	0.56	.23*	−.15	−.34**	−.24*	(.81)									
6. Number of interaction partners	25.69	12.38	.08	.29**	−.08	−.04	−.04	—								
7. Variability in gender of partner	0.45	0.06	.15	.06	.02	.14	.03	.24*	—							
8. Variability in hierarchical role	0.39	0.18	−.14	−.09	−.10	.15	−.17	−.02	.04	—						
9. Mean communion	0.31	0.11	−.07	−.10	.11	.13	.02	.03	−.04	.13	—					
10. Mean agency	0.14	0.09	−.03	.05	−.01	.13	−.10	.07	.23*	.10	.08	—				
11. Spin	1.01	0.23	−.11	.13	−.25*	−.14	.01	.03	−.01	−.00	−.76***	−.45***	(.89)			
12. Acquaintance	25.76	26.89	−.07	.40***	.01	.00	−.13	.16	.15	−.13	−.02	.04	.04	—		
13. Co-worker negative affect	2.07	0.48	−.08	.06	−.05	−.11	.17	.07	−.00	.07	−.13	.04	.12	−.05	(.61)	
14. Co-worker social avoidance	1.32	0.55	.02	.13	.01	.00	.04	.12	−.08	−.17	−.15	−.17	.24***	−.03	.30**	(.68)

Note. Gender was coded as 1 = female and 0 = male. Acquaintance is measured in months. Means, standard deviations, and correlations are at the level of the participant ($n = 84–85$), except for Variables 12–14, which are at the level of the co-worker rating ($n = 111–114$). Values in parentheses along the diagonal are reliability coefficients. The reliability of spin was calculated using Cronbach's alpha with scores calculated for the first, second, and third weeks of the study.
* $p < .05$. ** $p < .01$. *** $p < .001$.

three items ("I ignored him/her," "I avoided him/her," and "I did not make an effort to include him/her in a conversation") on a scale of 1 (*very little*) to 5 (*a great deal*).

Acquaintance. Co-workers reported how long they had been working with the focal participant who referred them to the study. Co-workers and focal participants had worked together an average of 25 months ($SD = 26$ months; range: 1 to 120 months).

Control variables. As in Studies 1 and 2, we controlled for the traits of Agreeableness, Extraversion, and Neuroticism as assessed with the NEO–FFI (Costa & McCrae, 1992); gender; age; three indices of situational variability (within-person variability in status, within-person variability in the gender of interaction partners, and within-person total number of interaction partners); and mean levels of communion and agency, calculated as in Studies 1 and 2.

Results

In Study 3, spin was negatively correlated with Agreeableness (see Table 4). As in past research and Studies 2 and 3, spin was not correlated with aspects of situational variability. Spin was correlated with co-worker social avoidance.

In the tests of the hypotheses, each co-worker rating ($n = 128$) was treated as an observation. As described previously, 56 focal participants had one co-worker survey and 29 had two co-worker surveys. Thus, we used multilevel modeling, because the observations (co-worker ratings) were nested within focal participants. All predictors were centered at their grand means.

Spin and co-worker social avoidance. In Hypothesis 3, we predicted a positive association between spin and co-worker social avoidance that becomes more pronounced as acquaintance increases. We conducted the test of this hypothesis in two steps. In Step 1, reported in the first column of Table 5, we entered spin and the control variables as predictors of co-worker avoidance. Spin did not exhibit a significant unique association with co-worker avoidance. In Step 2, reported in the second column, we added

acquaintance and its interaction term with spin to the model. The interaction, displayed in Figure 3, was significant and consistent with the hypothesis. As acquaintance increased, the association between spin and co-worker avoidance became more positive. We tested the simple slopes using the computational tool for two-way interactions in multilevel models developed by Preacher, Curran, and Bauer (2006). At 1 *SD* greater than the mean on acquaintance, the simple slope was significant (estimate = 1.05, $z = 4.36$, $p < .001$). The simple slope was also significant at the mean level of acquaintance (estimate = 0.44, $z = 2.36$, $p < .05$), but it was not significant at 1 *SD* less than the mean on acquaintance (estimate = −0.16, $z = 0.61$, $p = .54$). This pattern is consistent with expectation and, thus, Hypothesis 3 was supported.

Spin and co-worker negative affect. In Hypothesis 4, we predicted a positive association between spin and co-worker negative affect that becomes more pronounced as acquaintance increases. The results reported in the third column of Table 5 indicate that co-workers felt more negative affect when interacting with focal participants higher on Neuroticism. There was no direct association between spin and co-worker negative affect. In the fourth column of Table 5, we added the interaction term between spin and acquaintance; this term was significant. The interaction, displayed in Figure 4, was consistent with the hypothesis. As acquaintance increased, the slope relating spin to co-worker negative affect became more strongly positive. Tests of simple slopes revealed that at 1 *SD* greater than the mean on acquaintance, the simple slope for the association between spin and co-worker negative affect was significant (estimate = 0.51, $z = 2.21$, $p < .05$). The simple slope was not significant at the mean level of acquaintance (estimate = 0.16, $z = 0.87$, $p = .38$) and at 1 *SD* in acquaintance less than the mean on acquaintance (estimate = −0.19, $z = 0.75$, $p = .45$). This pattern is again consistent with expectation and, thus, Hypothesis 4 was supported.

Moderated mediation. We used multilevel modeling to estimate the significance of the indirect effect of spin on co-worker

Table 5
Summary of Multilevel Modeling Results (Study 3)

Variable	Co-worker social avoidance of focal participant		Co-worker negative affect with focal participant	
	Step 1	Step 2	Step 1	Step 2
Gender	−0.06	−0.03	0.12	0.13
Age	0.01	0.01	0.00	0.00
Agreeableness	0.18	0.07	0.11	0.05
Extraversion	0.12	0.06	−0.03	−0.06
Neuroticism	0.12	0.13	0.24*	0.26**
Number of interaction partners	0.00	0.00	0.00	0.00
Variability in gender of partner	−1.15	−0.74	−0.47	−0.20
Variability in hierarchical role	−0.57	−0.49	0.31	0.34
Mean communion	0.82	0.62	−0.53	−0.61
Mean agency	0.48	0.16	0.51	0.30
Spin	0.92	0.68	0.09	−0.06
Acquaintance		−0.00		−0.00
Spin × Acquaintance interaction		0.02**		0.02*

Note. Values are parameter estimates. Gender was coded as 1 = female and 0 = male. All variables in each step were entered simultaneously.
* $p < .05$. ** $p < .01$.

avoidance via co-worker negative affect at different levels of acquaintance (Muller et al., 2005). Support for a moderating effect of acquaintance on the mediated relation among spin, co-worker negative affect, and co-worker avoidance is inferred if the following criteria occur: there is an acquaintance by spin interaction predicting co-worker avoidance (Criterion 1); there is an acquain-

tance by spin interaction predicting co-worker negative affect (Criterion 2); co-worker negative affect is associated with co-worker avoidance (Criterion 3); and the interaction between acquaintance and spin predicting co-worker avoidance decreases when co-worker negative affect is entered in the model, suggesting that co-worker negative affect explains why co-workers avoid high spinners with whom they are well-acquainted (Criterion 4).
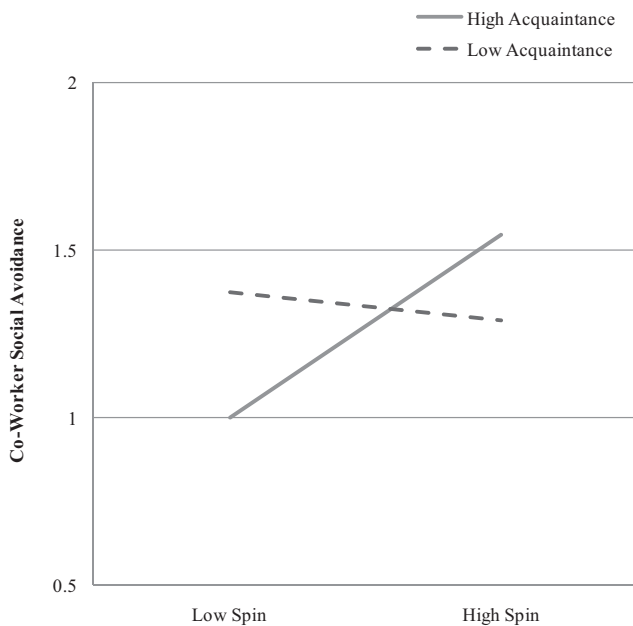

Figure 3. Spin is associated with more social avoidance by a co-worker among well-acquainted pairs, but not among pairs that are less well-acquainted. High spin and high acquaintance correspond to 1 *SD* greater than the mean on these respective variables, while low spin and low acquaintance correspond to 1 *SD* less than the mean on these respective variables.
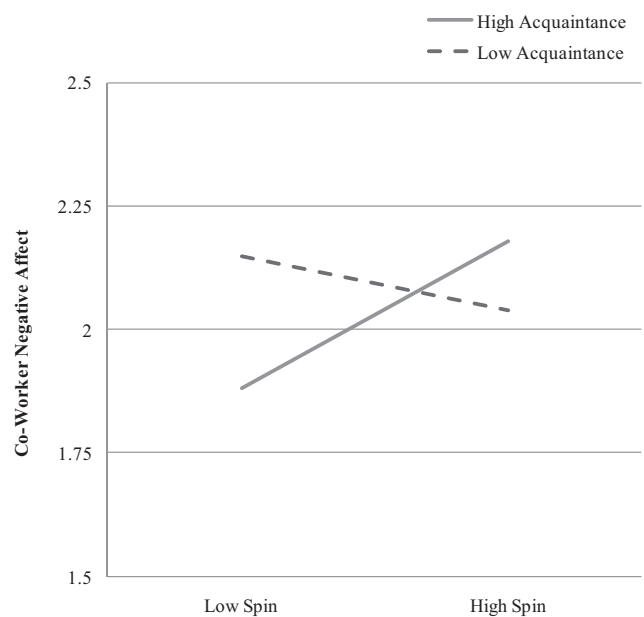

Figure 4. Spin is associated with more negative affect in a co-worker among well-acquainted pairs, but not among pairs that are less well-acquainted. High spin and high acquaintance correspond to 1 *SD* greater than the mean on these respective variables, while low spin and low acquaintance correspond to 1 *SD* less than the mean on these respective variables.

The results of the previously reported analyses had indicated that Criteria 1 and 2 were met. An additional model revealed that co-worker negative affect was positively related to co-worker avoidance, estimate = 0.38, $t(29) = 3.96$, $p < .001$, meeting Criterion 3. The effect of the acquaintance by spin interaction on co-worker avoidance was reduced by 17%, estimate = 0.02, $t(23) = 2.36$, $p < .05$, when we added co-worker negative affect, suggesting that co-worker negative affect partially explains why spin and acquaintance are jointly associated with co-worker avoidance, meeting Criterion 4. Thus, Hypothesis 5 was supported.

Subsidiary analysis of curvilinear associations. We tested for curvilinear associations by regressing co-worker negative affect and co-worker social avoidance on spin and the square of spin (Cohen et al., 2003). The square of spin did not predict co-worker avoidance, estimate = 0.45, $t(82) = 0.91$, $p = .37$, or co-worker negative affect, estimate = 0.21, $t(82) = 0.48$, $p = .63$.

Discussion

The findings of Study 3 advance our conceptual understanding of how spin is associated with the closeness of social relationships in three important ways. First, we examined criteria, co-worker negative affect and co-worker social avoidance, that provided additional insight about how people react to individuals with high spin. Second, we found that the associations were stronger among well-acquainted pairs than among briefly acquainted pairs; it may take time to learn of the difficulties of interacting with high spinners before others resort to avoiding them as a strategy to manage their relationships with them. Finally, we identified co-workers' negative affect as a mediating mechanism by which spin is associated with co-workers' avoidance. Moderated mediation analyses suggested that co-workers felt more negative affect when interacting with well-acquainted high spinners and that higher negative affect was associated with greater avoidance of well-acquainted high spinners.

As in Study 2, individuals with higher and lower spin may have invited co-workers with different characteristics to participate. Spin was neither associated with demographic characteristics (i.e., age and education) of co-workers nor associated with how many hours participants and co-workers spent together during the work week, estimates = 0.48 to 5.15, ts(82) = 0.74 to 1.26, ps > .20. Moreover, spin was not correlated with length of acquaintance (see Table 4). Individuals with high spin were more likely to have nominated a female co-worker than individuals with low spin, estimate = 0.38, $t(83) = 2.00$, $p < .05$; however, all results held when controlling for co-worker gender. Thus, there is considerable evidence that the co-workers of individuals with high spin and low spin were similar.

General Discussion

Past research on personality has largely emphasized constructs that capture mean levels of behavior, such as the five-factor model traits of personality. In this approach, the information about events in which individuals act differently from their central tendencies is not directly considered. Dynamic personality constructs use information about such instances, proposing that within-individual variability is a stable characteristic of personality. Past research has demonstrated that dynamic personality descriptors are stable fea-

tures of the person (Fleeson, 2001; Moskowitz & Zuroff, 2004), but little is known about whether these constructs are related to important criteria such as the characteristics of social relationships. The three studies reported here examine the potential utility of dynamic personality constructs to complement the prediction that is provided by extant mean-level variables.

We expected that higher interpersonal spin would be associated with social relationships that are less close, because interacting with high spinners elicits negative affect. We found support for associations between higher spin and indicators of less close social relationships in all three studies. These different indicators relied upon both self-reports and peer-reports. We also found in Study 3 support for the proposition that others feel negative affect when interacting with well-acquainted high spinners, and others' negative affect, in turn, is associated with others' social avoidance. In addition, we ruled out alternative explanations of associations due to other individual difference variables reflecting demographic and trait differences (i.e., gender, age, Agreeableness, Extraversion, and Neuroticism), situational variability, and mean levels of agentic and communal behaviors, which are the dimensions of behavior used in the calculation of interpersonal spin.

Theoretical Implications

Our findings consistently demonstrated that spin is associated with less close social relationships. These findings provide further indication that the dispersion of behavior that is reflected in high spin does not reflect adaptive flexibility to the demands of various changing situations, which might improve social relationships (Gangestad & Snyder, 2000; Leary, 1957; Paulhus & Martin, 1988). Conversely, low spin does not appear to reveal excessive rigidity, an absence of the capacity to respond appropriately and effectively to the flow of social interaction.

The findings of Study 3 illuminate the process by which spin may influence social relationships. Negative affect mediated the association between spin and the social avoidance of well-acquainted co-workers. Mediation via negative affect in Study 3 was partial, suggesting that there are other mechanisms by which spin undermines social relationships. One possible mechanism may reflect past findings that consistency is a valued trait associated with attributes such as strength and honesty, and inconsistency is an undesirable trait associated with attributes such as irrationality and instability (Allgeier, Byrne, Brooks, & Revnes, 1979; Cialdini, 2001). Consistency is valued because it offers shortcuts through the complexities of everyday life and simplifies everyday decisions. Individuals may seek to dissociate from high spinners because they are seen to be inconsistent people, causing high spinners to have social relationships that are less close.

The findings suggest that dynamic personality constructs have the potential to improve our understanding and prediction of social criteria of interest to researchers and society. Incorporating dynamic personality descriptors such as spin could promote incremental prediction when using personality characteristics. Reviews and meta-analytic research have documented that mean-level personality variables predict outcomes such as well-being, divorce, job performance, occupational attainment, and community involvement (Barrick, Mount, & Judge, 2001; Ozer & Benet-Martínez, 2006). Predictions from personality traits often match the predictive validity of predictions for competing constructs such

as socioeconomic status and cognitive ability (B. W. Roberts et al., 2007) and often exceed effect sizes found in other fields, including medicine (Meyer et al., 2001). Yet, this past research may underestimate how much personality predicts criteria, because the set of descriptors used is incomplete. There are additional indices that represent within-individual personality processes, such as the within-individual covariation of interpersonal behavior and perception, which may also have consequences (Moskowitz, 2009; Moskowitz, Ho, & Turcotte-Tremblay, 2007). Incorporating dynamic personality constructs in future research may provide a greater and more accurate estimate of the importance of personality.

Limitations and Future Research

One limitation of the present investigation is that we cannot be certain about the direction of causality between spin and the closeness of social relationships. Spin is highly stable over time, as scores generated for different weeks were reliable, a necessary condition for the causal effect of high spin. Even so, future longitudinal research needs to examine spin and the criteria over time to increase support that spin has causal effects on the criteria. Researchers could also design experiments in which participants are exposed to the behavior of high and low spinner participants or confederates. Such studies would be demanding to conduct, as the designs would require multiple interactions to simulate the effects of spin having an effect that develops over time. Yet such an approach would address the limitation in Studies 2 and 3 that high spinners might have chosen to invite different types of co-workers to report on their social relationships.

Although our investigation found spin to be detrimental to relationships, there may be situations in which higher spin is associated with some positive criteria. For instance, observers may perceive high spinners to be interesting and creative individuals, at least at the beginning of an acquaintance. Also, individuals with high spin may be better able to begin anew when changing settings such that their negative affect and behavior may spill over less from one setting to another (e.g., reducing spillover from the work day to home life). Spin may also interact with the spin of others to shape social outcomes. A high spinner may not feel as negatively as a low spinner when interacting with another high spinner. In addition, equal degrees of spin involving different styles of behavior may have different consequences. Spin does not require rapid switching from interaction to interaction, but in those cases when it does reflect rapid switching, some patterns may be more detrimental to relationships than others. For example, becoming quarrelsome immediately after being submissive could be seen by others as passive-aggressive and generate irritation and hostility, but becoming agreeable immediately after being dominant could be less detrimental to the social relationship. Finally, it remains possible that there is a level of spin lower than what we observed that is incapacitating, because it produces an overly rigid pattern of unresponsive interpersonal behavior.

Conclusion

Dynamic personality constructs have the potential to provide a fuller understanding of how personality shapes individuals' social relationships. In this investigation, we found that interpersonal spin, the degree of dispersion in a person's interpersonal behaviors across social situations and over time, was consistently associated with social relationships that are less close. We also found that individuals avoid other individuals with whom they are well-acquainted who have high spin, because they feel negative affect when interacting with them. Future research should build on the current work to understand the relevance of dynamic personality constructs to individual and relational functioning.

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