

## Regulatory Mode and Preferred Leadership Styles: How Fit Increases Job Satisfaction

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Four studies conducted in diverse organizational contexts examined preferences and fit between two regulatory modes, referred to as "locomotion" and "assessment" (Higgins, Kruglanski, & Pierro, 2003; Kruglanski, et al., 2000), and leadership styles practiced by supervisors over their subordinates. The locomotion mode constitutes the aspect of self-regulation that is concerned with movement from state to state, and the assessment mode constitutes the aspect of self-regulation that is concerned with making comparisons. The present studies consistently show that individuals high in locomotion prefer a "forceful" leadership style, represented by "coercive", "legitimate", and "directive" kinds of strategic influence, whereas individuals high in assessment prefer an "advisory" leadership style, represented by "expert", "referent", and "participative" kinds of strategic influence. Consistent with regulatory fit theory (Higgins, 2000), the job satisfaction of subordinates was found to be higher when the style of strategic influence practiced by their supervisor fit their regulatory mode orientation (high locomotion/"forceful" style; high assessment/"advisory" style).

Social influence, conceived of in terms of the ways whereby people deliberately affect each other's actions, cognitions and feelings, counts among social psychology's most fundamental topics of study. Whether one deals with conformity, persuasion, leadership or social change, the underlying concern is with social influence in one of its forms. From both theoretical and pragmatic perspectives, a particularly interesting question concerns the *strategies* of social influence. Over the centuries, writers like Machiavelli, Hobbes, Dale Carnegie and many others had numerous insights to offer about how best to influence people and enlist their assistance in advancing one's own interests.

An influential classification of the different potential bases of social influence was offered by French and

Raven (1959) in their ground-breaking analysis of *social power* (see also Raven, 1992, 1993; Raven & Kruglanski, 1970). French and Raven (1959) distinguished between five specific power bases: (1) *coercive power*, related to the threat of punishment; (2) *legitimate power*, related to one's normatively accepted right to exert influence; (3) *expert power*, related to the influencing agent's superior knowledge recognized by the influence target; (4) *referent power*, based on the target's identification with the influencing agent; and (5) *reward power*, related to one's ability to dispense desirable objects like money or effect desirable states like security or pleasure.

The bases of power have been subdivided into two more general categories that Raven and his colleagues refer to as "strong" and "soft" (Bui, Raven, & Schwarzwald, 1994; Raven, Schwarzwald, & Koslowsky, 1998). *Coercive* and *legitimate* power constitute bases in the "strong" category in which compliance is demanded of others via the invocation of strictly enforceable rules

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or through the threat of painful consequences contingent on the failure to comply. By contrast, *expert*, *referent*, and *reward* power constitute bases in the "soft" category in which others are essentially free to decide whether to accept the *advice* or *counsel* of the influencer.

Conceptually related to these two types of power bases is the distinction between *autocratic* and *democratic* leadership styles (Lewin & Lippit, 1938; Lewin, Lippit & White, 1939; Lippit & White, 1960; see for a review Bass, 1990). In his review of the literature on leadership styles, Bass (1990) concluded that leadership practices fall on a continuum ranging from purely autocratic to purely democratic (see also Stewart & Manz, 1997). This clustering of widely recognized leader behaviors is empirically supported by relevant factor analyses (e.g., Sweeney, Fiechtner, & Samores, 1975). According to Bass (1990), the autocratic cluster includes such styles as authoritarian, directive, and coercive, whereas the democratic cluster includes such styles as democratic, participative, and consultative.

The present paper is concerned with these two basic types of leadership styles. To avoid associations with extraneous content of political labels (e.g., "autocratic" versus "democratic") or labels with evaluative connotations (e.g., "strong" versus "soft"), we will refer to the "strong"/"autocratic" type of leadership style as "*forceful*" and the "soft"/"democratic" type of leadership style as "*advisory*". "Forceful" captures the demanding, directive and coercive nature of the "strong"/"autocratic" type of leadership while remaining more neutral in political content and evaluative tone. To "force" means to press, drive or compel. "Advisory" captures the counselling, consultative and participative nature of the "soft"/"democratic" type of leadership style while also remaining more neutral in political content and evaluative tone. To "advise" means to recommend, counsel, or consult, and "advised" means considered and thought out.

The "forceful" and "advisory" leadership styles represent different ways of influencing others. In organizational settings, supervisors use these different strategies to influence the goal pursuits of their subordinates. How do these leadership strategies of supervisors affect the job satisfaction of the subordinates who are the target of the influence strategies? Is impact of leadership strategy invariant across circumstances or is it contingent on a *fit* between type of leadership strategy and type of target of influence. The present research assumes the latter, and tests the hypothesis that a *fit* between relevant personality dimensions and type of leadership style plays an important role in determining the impact of supervisors' social influence strategies on subordinates' job satisfaction.

This impact of fit on job satisfaction can be conceptualized in terms of regulatory fit theory (Higgins, 2000). Regulatory fit occurs when individuals' orientation

toward goal pursuit is sustained by the manner of the goal pursuit, by how progress toward the goal is striven for. Previous studies have examined the fit between people's promotion orientation on accomplishments versus prevention orientation on security, and the strategic means of eagerness (trying to ensure "hits") versus vigilance (trying to ensure "correct rejections"). Several studies (see Freitas & Higgins, 2002; Freitas, Liberman, & Higgins, 2002) have found that individuals enjoy an activity more when there is a fit between their regulatory focus orientation and the strategic means used in that activity (promotion focus/eagerness means; prevention focus/vigilance means). There is also evidence from a daily diary study that life satisfaction is higher when there is a fit between individuals' regulatory focus orientation and the strategic means they use to cope with everyday problems (Grant, Higgins, Baer & Bolger, 2006).

Often individuals themselves determine how they pursue a goal, and when this happens they are likely to pursue the goal in a manner that fits their goal orientation. But it is not always the case that individuals determine how they pursue a goal. Other people with power over them can determine how they pursue a goal, as parents often do with children, teachers with students, and supervisors with those they supervise. Indeed, in experimental work on the effects of regulatory fit, it is the experimenter who determines how the participants pursue their goal, as by having participants make a decision in an eager way or in a vigilant way, thereby creating fit and non-fit conditions (e.g., Higgins, Idson, Freitas, Spiegel, & Molden, 2003). Thus, although regulatory fit is itself an intrapersonal motivational experience, the determinants of that experience can be interpersonal. Regulatory fit concerns the relation between a person's goal orientation and the manner of that person's goal pursuit—whether the manner sustains or disrupts the orientation—but the manner of goal pursuit can be determined by another person. This is precisely the situation when a supervisor has a leadership style, a preferred way of carrying out goal pursuits or tasks, that determines how subordinates carry out their work. Different leadership styles make the followers pursue their goals, perform their tasks, in different ways, and these different ways can sustain (fit) or disrupt (non-fit) the goal pursuit orientations of the followers.

Supervisors affect the day-to-day activities of their subordinates through the use of different influence strategies. These influence strategies may provide a better fit for the self-regulatory orientations of some subordinates than others. Which self-regulatory orientations might have a better fit with either the "forceful" influence strategy or the "advisory" influence strategy? We hypothesized that locomotion and assessment, two self-regulatory orientations distinguished by regulatory mode theory (see Higgins et al., 2003; Kruglanski et al., 2000),

would have a better fit, respectively, with the "forceful" and the "advisory" strategies. Next, we describe these two regulatory modes and discuss how they relate to the "forceful" and "advisory" leadership styles.

Most goal pursuit activities involve two essential self-regulatory modes: a mode of *assessment* and a mode of *locomotion*. Assessment is the aspect of self-regulation that is concerned with critically evaluating entities or states, such as goals or means in relation to alternatives in order to judge relative quality (Higgins et al., 2003; Kruglanski et al., 2000). Individuals with strong assessment concerns want to compare all options and search for new possibilities before making a decision, even if that means waiting. They relate past and future actions to critical standards. They want to choose the option that has the best attributes overall compared to the alternative options; they want to make the correct choice (Higgins et al., 2003; Kruglanski et al., 2000). In a decision-making context, for example, Avnet and Higgins (2003) found that individuals with high assessment concerns preferred to choose among a set of alternatives by fully comparing each option to one another on all of the attribute dimensions. This full comparison strategy is a thorough assessment process because it involves comparing all options on all attributes.

By contrast, the locomotion mode is the aspect of self-regulation that is concerned with movement from state to state. Individuals with strong locomotion concerns want to take action, to get started, even if that means not considering all the options fully. Once the task is initiated, they want to maintain it and complete it without undue disruptions or delays (Higgins et al., 2003; Kruglanski et al., 2000). They want to make steady progress. Avnet and Higgins (2003), for example, found that individuals with high locomotion concerns preferred to make their choice by eliminating at each step whichever option was worst on the attribute dimension being examined. This progressive elimination strategy is a relatively quick and steady way to identify a final course of action because only one option remains at the end.

Research by Higgins, Kruglanski, and their colleagues (see Higgins et al., 2003; Kruglanski et al., 2000) has shown that locomotion and assessment may be differentially emphasized by different individuals. Kruglanski et al. (2000) developed two separate scales to measure chronic individual differences in assessment and locomotion. In a comprehensive series of studies, these authors demonstrated the unidimensionality, internal consistency, and temporal stability of each scale. They found that locomotion and assessment tendencies are essentially uncorrelated with each other (i.e., a person can be high or low on both, or high on one and low on the other, etc.), that each are needed

for self-regulatory success, and that each relates to a distinct task orientation and motivational emphasis.

Given the different self-regulatory concerns associated with a high assessment orientation and a high locomotion orientation, which leadership style would sustain or fit each of these orientations? A "forceful" leadership style is demanding, directive and coercive. Under such leadership, a follower would be compelled and pressed forward while working on a task and disruptions would be minimal. This is precisely the manner of goal pursuit that would sustain or fit someone with a high locomotion orientation. In contrast, because assessment is concerned with making comparisons rather than movement from state to state, this leadership style is not relevant to someone with a high assessment orientation.

An "advisory" leadership style involves counselling, consultation and participation. Advice about alternative possibilities is given. Options to be considered and mulled over are offered. Standards and critical evaluation are provided. Under such leadership, a follower would compare different options, consider new possibilities, and critically evaluate options in relation to standards while working on a task. This is precisely the manner of goal pursuit that would sustain or fit someone with a high assessment orientation. In contrast, this leadership style is not relevant to someone with a high locomotion orientation.

Our first set of predictions is that preference for a "forceful" leadership style will be greater as individuals' locomotion orientation is greater, and preference for an "advisory" leadership style will be greater as individuals' assessment orientation is greater. Studies 1–3 test these predictions. Once these predictions of distinct leadership preferences as a function of regulatory mode are empirically supported, an additional regulatory fit prediction can be made. Previous research has shown that when there is fit, people engage more strongly in what they are doing and "feel right" about it (see Higgins, 2005). In the context of organizational activities, these fit effects should increase employees' job satisfaction. Thus, our second set of predictions is that subordinates' job satisfaction will be higher when there is a greater fit between their regulatory mode orientation and the leadership style of their supervisor (high locomotion/"forceful" style; high assessment/"advisory" style). These predictions are tested in Study 4.

## STUDY 1

### Participants

One hundred bank clerks in Rome, Italy (61 men and 39 women) participated in the study on a voluntary basis. Their mean age was 39.82 years (S.D. = 8.40).

46 of our participants had high school education (13 years in all), and 52 college education (from 17 to 19 years in all).

### Procedure

Participants filled out the Locomotion and Assessment scales followed by a number of filler questionnaires. They then completed a 20-item measure of French and Raven's (1959) social power bases developed by Hinkin and Schriesheim (1989).

*Locomotion and assessment scales.* The Italian version of the Locomotion and Assessment Scales (Kruglanski et al., 2000) constitutes two separate 12-item self-report measures designed to tap individual differences in these tendencies. Specifically, respondents rate the extent to which they agree with self-descriptive statements reflecting *locomotion* (e.g., "By the time I accomplish a task, I already have the next one in mind") or *assessment* (e.g., "I spend a great deal of time taking inventory of my positive and negative characteristics"). Ratings are made on a 6-point Likert type scale with the response alternatives anchored at the ends with 1 (*strongly disagree*) to 6 (*strongly agree*).

We computed two composite scores (one for Locomotion and one for Assessment) by summing across responses to each item. Previous studies including Italian samples (Kruglanski et al., 2000) have demonstrated that the Locomotion and Assessment scales have satisfactory reliability (Cronbach  $\alpha = .82$  for the Locomotion Scale and  $.78$  for the Assessment scale). In this sample, the  $\alpha$  for the Locomotion Scale was  $.72$  and that for the Assessment Scale was  $.80$ . To further examine whether there is a general consistency between the item-level and aggregate level of responses, the full scale analyses with individual item analyses show that the Cronbach's Alpha of both Locomotion and Assessment Scales is not improved if any item is deleted.

*Assessing the bases of social power.* We used a modified version of the scale of social power bases developed by Hinkin and Schriesheim (1989). Our modification of this scale concerned the request made to the participants. Whereas in the original version participants respond to the statement "My supervisor can...", in the present research we used a *Preference* or "Ideal" form, designed to tap our participants' preferences for types of power. Accordingly, the key statement participants responded to was "My supervisor *should*...". A similar instruction procedure was used by Bales (1988) in the SYMLOG System to rate the kind of behavior that group members feel would be ideal for a particular member. The 20 items

of this scale pertain to French and Raven's (1959) five bases of social power: *Expert Power* (exemplified by an item such as, "Provide me with sound job-related advice"); *Referent Power* (e.g., "Make me feel as if he/she approves of me"); *Reward Power* (e.g., "Provide me with special benefits"); *Coercive Power* (e.g., "Give me undesirable job assignments"); and *Legitimate Power* (e.g., "Make me feel that I have commitments to meet"). Responses to these items are made on a 5-point scale with the response alternatives ranging from 1 (*never*) to 5 (*always*). We computed for each participant her or his score with regard to each power base (the respective Cronbach  $\alpha$  for the different bases were: reward (.74), referent (.84), expert (.81), coercive (.61), and legitimate (.88).

Because of our interest in the differentiation between "forceful" and "advisory" power bases [previously described as "strong" and "soft", respectively (Bui et al., 1994; Raven et al., 1998)], we performed a factor analysis, with Varimax rotation, on the five power base scores. Consistent with the above differentiation, a two factor solution was obtained. The first factor, accounting for 38.77% of the variance consisted of the "advisory" bases: reward (loading .78), referent (loading .75) and expert (loading .62). The second factor, explaining 24.66% of the variance consisted of the "forceful" bases: coercive (loading .89) and legitimate (loading .62). For each participant we then computed a "forceful" and an "advisory" power base score (Cronbach  $\alpha = .77$  and  $.82$  respectively).

## RESULTS

A summary of descriptive statistics and correlations between all variables is presented in Table 1. The first thing to note here is that Locomotion and Assessment were not significantly related to each other ( $r = .13$ , n.s.), thus confirming results of Kruglanski et al. (2000).

To further examine the relations between our variables we performed five separate multiple regressions on participants' Preference bases of social power where each of the five power bases were regressed on participants' locomotion and assessment scores<sup>1</sup>. A summary of these analyses is reported in Table 2.

As shown in Table 2, locomotion (but not assessment) was significantly and positively related to coercive power ( $\beta = .27$ ,  $p < .007$ ), and to legitimate power

<sup>1</sup>As a preliminary step, we tested also the interactions between locomotion assessment and the different types of power. This preliminary analysis was performed also in all our subsequent studies presented here. Because the results did not show any significant interaction effects in any one of our studies, we excluded the interaction terms from the analyses.

TABLE 1  
Descriptive Statistics and Correlations Between Variables (Study 1)

Variable	M	SD	1	2	3	4	5	6	7	8
1. Locomotion	4.50	.57	—							
2. Assessment	3.51	.85	.13	—						
3. Coercive power	1.39	.38	.28**	.04	—					
4. Legitimate power	3.13	.92	.29**	.17	.26**	—				
5. Expert power	4.21	.67	.11	.30**	-.11	.32***	—			
6. Referent power	3.63	.69	.17	.27**	.10	.39***	.23*	—		
7. Reward power	3.13	.74	.10	.35***	-.17	.20*	.22*	.49***	—	
8. Forceful bases	2.26	.54	.34***	.16	.58***	.94***	.24*	.36***	.11	—
9. Advisory bases	3.66	.52	.17	.41***	-.09	.41***	.64***	.78***	.79***	.32***

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

( $\beta = .27$ ,  $p < .007$ ), whereas assessment (but not locomotion) was significantly and positively related to expert power ( $\beta = .29$ ,  $p < .004$ ), referent power ( $\beta = .255$ ,  $p < .01$ ), and reward power ( $\beta = .34$ ,  $p < .001$ ).

We also regressed the two aggregate indices of power base, representing "forceful" and "advisory" bases of power, on participants' locomotion and assessment scores (see Table 2). The results indicate that locomotion (but not assessment) was significantly and positively related to the "forceful" bases of power ( $\beta = .33$ ,

$p < .001$ ), whereas assessment (but not locomotion) was significantly and positively related to the "advisory" power bases ( $\beta = .40$ ,  $p < .000$ ).

## STUDY 2

The purpose of this study was to attempt to replicate the results of Study 1 with a different participant population.

### Participants

73 firemen in Rome, Italy (all men) participated in the study on a voluntary basis. Their mean age was 34.14 years (S.D. = 7.22) and their educational levels varied between primary school education of 8 years (17 participants) and high school education of 13 years (56 participants).

### Procedure

Participants filled out the same Italian version of the Locomotion and Assessment Scales (Kruglanski et al., 2000) used in Study 1, followed by a number of filler questionnaires. In this sample, the Cronbach  $\alpha$  for the Locomotion scale was .70 and for the Assessment Scale it was .71. Again, the Cronbach's Alpha of both Locomotion and Assessment Scales is not improved if any item is deleted. Participants then completed the same, Preference version of Hinkin and Schriesheim's (1989) 20-item scale of French and Raven's power bases used in Study 1. In this sample, the respective Cronbach  $\alpha$  for the different bases were: reward (.84), referent (.74), expert (.84), coercive (.63), and legitimate (.83). As in Study 1, we computed five scores for each participant referring to the five bases of social power, and we performed a factor analysis with a Varimax rotation on these scores. Again, a two factor solution was obtained similar to that of Study 1. The first factor,

TABLE 2  
Summary of Results of Regression Analysis (Study 1)

Predictor	Beta	p value
<i>Criteria: Coercive Power</i>		
Locomotion	.273	.007
Assessment	.009	ns
$F(2, 97) = 3.961$ , $p < .022$ , $R^2 = .075$		
<i>Criteria: Legitimate Power</i>		
Locomotion	.273	.007
Assessment	.136	ns
$F(2, 97) = 5.553$ , $p < .005$ , $R^2 = .102$		
<i>Criteria: Expert Power</i>		
Locomotion	.069	ns
Assessment	.286	.004
$F(2, 97) = 4.888$ , $p < .009$ , $R^2 = .092$		
<i>Criteria: Referent Power</i>		
Locomotion	.135	ns
Assessment	.255	.01
$F(2, 97) = 4.907$ , $p < .009$ , $R^2 = .092$		
<i>Criteria: Reward Power</i>		
Locomotion	.055	ns
Assessment	.340	.001
$F(2, 97) = 6.819$ , $p < .002$ , $R^2 = .123$		
<i>Criteria: Forceful Bases</i>		
Locomotion	.327	.001
Assessment	.118	ns
$F(2, 97) = 7.323$ , $p < .001$ , $R^2 = .131$		
<i>Criteria: Advisory Bases</i>		
Locomotion	.116	ns
Assessment	.399	.000
$F(2, 97) = 11.007$ , $p < .000$ , $R^2 = .185$		

TABLE 3  
Descriptive Statistics and Correlations Between Variables (Study 2)

Variable	M	SD	1	2	3	4	5	6	7	8
1. Locomotion	4.99	.49	—							
2. Assessment	2.97	.65	-.14	—						
3. Coercive power	1.34	.43	.24*	-.05	—					
4. Legitimate power	2.90	.74	.35**	.09	.28**	—				
5. Expert power	4.29	.63	.16	.33**	-.14	.09	—			
6. Referent power	3.70	.61	.01	.26*	-.23	.08	.11	—		
7. Reward power	3.47	.95	.09	.02	.01	-.06	.14	.31**	—	
8. Forceful bases	2.12	.48	.38***	.05	.67***	.90***	.01	-.04	-.04	—
9. Advisory bases	3.82	.50	.12	.26*	-.15	.04	.55***	.65***	.81***	-.04

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

explaining 29.81% of the variance consisted of the "advisory" power bases: reward (loading .68), referent (loading .76) and expert (loading .542). The second factor, explaining 24.70% of the variance, consisted of the "forceful" bases: coercive (loading .78), and legitimate (loading .81). We then computed aggregate "advisory" and "forceful" power base scores for each participant (Cronbach  $\alpha = .74$  and  $.78$  respectively).

## RESULTS

A summary of descriptive statistics and correlations between all our variables is presented in Table 3. As can be seen, Locomotion and Assessment were not significantly related to each other ( $r = -.16$ , *n.s.*), thus confirming results of study 1.

As in our first study, we performed five separate multiple regressions on participants' Preference bases of social power regressing each of the five bases on participants' locomotion and assessment scores. We followed this up by similar analyses performed on the aggregated "advisory" and "forceful" power base scores. A summary of these analyses is presented in Table 4.

As can be seen, locomotion (but not assessment) was significantly and positively related to coercive power ( $\beta = .23$ ,  $p < .049$ ) and to legitimate power ( $\beta = .37$ ,  $p < .002$ ), whereas assessment (but not locomotion) was significantly and positively related to expert power ( $\beta = .36$ ,  $p < .002$ ) and referent power ( $\beta = .27$ ,  $p < .025$ ).

These results are paralleled by results of analyses in which the two aggregate indices, representing the "advisory" and "forceful" power bases, were regressed on participant's locomotion and assessment scores (see Table 4). The results indicate that locomotion (but not assessment) was significantly and positively related to the "forceful" bases index ( $\beta = .39$ ,  $p < .001$ ), whereas assessment (but not locomotion) was significantly and

positively related to the "advisory" bases index ( $\beta = .28$ ,  $p < .018$ ).

Note that in this second study we did not replicate the relation between assessment and reward power found in Study 1. A possible reason for this is that the fire fighter organization is a state organization where financial incentives are fixed, and hence probably less important to the individuals involved than in the context of a financial institution such as a bank. Furthermore, it is probable that, given the risks and required sacrifices

TABLE 4  
Summary of Results of Regression Analysis (Study 2)

Predictor	Beta	p value
<i>Criteria: Coercive Power</i>		
Locomotion	.235	.049
Assessment	-.020	<i>ns</i>
$F(2, 70) = 2.117$ , $p < .128$ , $R^2 = .057$		
<i>Criteria: Legitimate Power</i>		
Locomotion	.368	.002
Assessment	.146	<i>ns</i>
$F(2, 70) = 5.747$ , $p < .005$ , $R^2 = .141$		
<i>Criteria: Expert Power</i>		
Locomotion	.213	<i>ns</i>
Assessment	.360	.002
$F(2, 70) = 6.299$ , $p < .003$ , $R^2 = .153$		
<i>Criteria: Referent Power</i>		
Locomotion	.046	<i>ns</i>
Assessment	.267	.025
$F(2, 70) = 2.625$ , $p < .080$ , $R^2 = .070$		
<i>Criteria: Reward Power</i>		
Locomotion	.091	<i>ns</i>
Assessment	.035	<i>ns</i>
$F(2, 70) = .304$ , $p < .739$ , $R^2 = .009$		
<i>Criteria: Forceful Bases</i>		
Locomotion	.391	.001
Assessment	.104	<i>ns</i>
$F(2, 70) = 6.270$ , $p < .003$ , $R^2 = .152$		
<i>Criteria: Advisory Bases</i>		
Locomotion	.165	<i>ns</i>
Assessment	.280	.018
$F(2, 70) = 3.555$ , $p < .034$ , $R^2 = .092$		

involved in fire fighting activities, fire fighters' motivation is probably intrinsic rather than extrinsic (e.g., tied to monetary rewards).

## DISCUSSION OF STUDIES 1 AND 2

Studies 1 and 2 yielded strong and consistent results. In both studies, individuals with a stronger locomotion orientation preferred a leader who used coercive power and legitimate power as ways to influence subordinates—both “forceful” influence strategies. This preference for forceful or demanding strategies is natural because high locomotors want to initiate and maintain movement from state to state. In both studies, individuals with a stronger assessment orientation preferred a leader who used expert power and referent power as ways to influence subordinates—both “advisory” influence strategies. This preference for advisory or counseling strategies is also natural because high assessors want to consider different options and relate past and future actions to critical standards.

The purpose of Study 3 was to generalize the findings of Studies 1 and 2 by re-testing these preferences of high locomotors for “forceful” influence strategies and high assessors for “advisory” influence strategies with not only a different population of participants but also a new measure of “forceful” and “advisory” leadership styles. Study 3 tests the “forceful” style of “directive” leadership and the “advisory” style of “participative” leadership.

## STUDY 3

As we described earlier, Bass (1990; see also Stewart & Manz, 1997) concludes that leadership practices fall on a continuum ranging from more autocratic to more democratic. In the present study, we considered the four leadership styles described in Path-Goal Theory by House and Mitchell (1974; see also, Evans, 1970; House, 1971; House & Dessler, 1974). “Directive” leadership style relates to Bass’s autocratic cluster and is clearly a “forceful” influence strategy because *directive* leadership characterizes leaders who issue to subordinates explicit instructions about their task, including what is expected of them, how is it to be done, and when it should be initiated and completed. In contrast, “participative” leadership relates to Bass’s democratic cluster and is clearly an “advisory” influence strategy because *participative* leadership characterizes leaders who invite subordinates to share in the decision making process by raising and evaluating alternatives.

The study also included the “achievement” leadership style and the “supportive” leadership style that are not

differentially related to locomotion and assessment. *Achievement oriented* leadership is characterized by supervisors who want subordinates to perform at a high level. *Supportive* leadership is characterized by supervisors who are friendly, approachable and attend to the well-being of the subordinates. We predicted that individuals with a stronger locomotion orientation would prefer “directive” strategic influence whereas individuals with a stronger assessment orientation would prefer “participative” strategic influence.

## Participants

141 employees (108 men and 33 women) of several Italian branches of a German investment company (Bayerische Sim), participated in the study on a voluntary basis. Of the total sample, the 14.2% (20) came from branches located in Northern Italy (Lombardia, Piemonte, Liguria, Veneto and Emilia Romagna), the 60.3% (85) came from branches located in Central Italy (Lazio, Toscana, Umbria, and Marche) and the 25.5% (36) came from branches located in Southern Italy (Campania, Calabria, Puglia, and Sicilia). Their mean age was 35.8 years (S.D. = 8.56). 8 participants had primary school education (8 years in total), 91 had high school education (13 years), and 41 had college education (17 to 19 years) with one participant failing to report his education level. Of this total sample, 35 participants were managers and 108 were vendors.

## Procedure

All participants filled out the Locomotion and Assessment scales followed by a number of filler questionnaires. They then completed a *Preference* version of the Path-Goal Leadership Styles Questionnaire (Indvik, 1985, 1988; Northouse, 1997).

*Locomotion and assessment scales.* Participants filled out the same Italian version of the Locomotion and Assessment scales (Kruglanski et al., 2000) used in Study 1, followed by a number of filler questionnaires. Two composite scores were computed (one for locomotion and one for assessment) by summing across responses to each item. In the present sample the Cronbach  $\alpha$  for the Locomotion Scale was .82, whereas that for the Assessment Scale was .65.

As in our previous studies, the Cronbach’s Alpha of both Locomotion and Assessment Scales is not improved if any item is deleted.

*Assessing preferred leadership styles.* We used a 20-item Path-Goal Leadership Questionnaire (Indvik, 1985, 1988; Northouse, 1997) to assess our participants’

TABLE 5  
Descriptive Statistics and Correlations Between Variables (*Study 3*)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Locomotion	4.85	.72	—				
2. Assessment	3.49	.67	.01	—			
3. Directive	6.27	.78	.39***	.15	—		
4. Participative	5.04	.99	.13	.23**	.16*	—	
5. Supportive	5.20	.56	.14	.09	.40***	.38***	—
6. Achievement-oriented	5.97	.77	.41***	.15	.56***	.26**	.32***

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

preferred leadership styles. As noted earlier, this particular scale is designed to assess four different styles of leadership. The *directive* style is represented by items such as “informs subordinates about what needs to be done and how it needs to be done”, and the *participative* style is tapped by items such as “consults with subordinates when facing a problem”. The *achievement* style is tapped by items such as “encourages continual improvement in subordinates’ performance”, and the *supportive* style is tapped by items such as “maintains a friendly working relationship with subordinates”.

In the Preference version filled out by all the participants, they indicated on a 7-point scale “How often would it be ideal to perform (a given behavior) in order to be most effective as a leader?”. The response alternatives ranged from 1 (never) to 7 (always). Cronbach  $\alpha$  for the various leadership styles were .81 for *directive* style, .62 for *supportive* style, .65 for *participative* style, and .62 for *achievement oriented* style.

## RESULTS

A summary of descriptive statistics and correlations between all the present variables is presented in Table 5. Confirming results of our previous studies, Locomotion and Assessment were not significantly related to each other ( $r = .01$ , n.s.).

*Locomotion, assessment and preferred leadership styles.* We regressed each of the four preferred leadership styles on participants’ locomotion and assessment scores. The results of these analyses are summarized in Table 6.

As predicted, and shown in Table 6, locomotion had a highly significant positive relation to the “directive” strategic style ( $\beta = .39$ ,  $p < .001$ ), and assessment had a highly significant positive relation to the “participative” strategic style ( $\beta = .225$ ,  $p < .01$ ). The relation between locomotion and the “participative” style was non-significant and the relation between assessment and the “directive” style was only marginally significant.

Neither locomotion nor assessment had a significant relation to the “supportive” strategic style. The fact that assessment had no significant relation to this style is informative because it highlights the fact that the “advisory” style is not preferred by high assessors because of some supportive qualities it might have but rather because it provides options to be considered and critically evaluated. Both locomotion (highly significant) and assessment (marginally significant) had positive relations to the “achievement” strategic style. Our previous studies have found that achievement is higher when individuals are both high locomotors and high assessors (Kruglanski et al., 2000). In addition, “achievement” strategic items such as “encourages continual improvement in subordinates’ performance” could relate both to high assessors’ desire for critical evaluation (i.e., compare current performance to past performance to evaluate improvement) and, perhaps especially, to high locomotors’ desire to keep moving and changing (i.e., continual improvement). Nonetheless, the “achievement” strategic style is neither as “forceful” as the “directive” strategic style nor as “advisory” as the “participative” style. It is best conceptualized along some

TABLE 6  
Summary of Results of Regression Analysis (Ideal Leadership *Study 3*)

Predictor	Beta	<i>p</i> -value
<i>Criteria: Directive</i>		
Locomotion	.387	.001
Assessment	.149	.06
$F(2, 138) = 14.381, p < .000, R^2 = .172$		
<i>Criteria: Participative</i>		
Locomotion	.127	.125
Assessment	.225	.007
$F(2, 138) = 4.948, p < .008, R^2 = .067$		
<i>Criteria: Supportive</i>		
Locomotion	.142	.09
Assessment	.092	.275
$F(2, 138) = 2.038, p < .134, R^2 = .029$		
<i>Criteria: Achievement-Oriented</i>		
Locomotion	.405	.000
Assessment	.146	.059
$F(2, 138) = 15.723, p < .000, R^2 = .186$		



other strategic influence dimension that deserves attention in future research.

### DISCUSSION OF STUDIES 1, 2 & 3

The results of Study 3 conceptually replicate the findings of Studies 1 and 2. Study 3 used "directive" leadership to represent the "forceful" strategic influence style and used "participative" leadership to present the "advisory" strategic influence style. Like Studies 1 and 2, Study 3 found that individuals with a stronger locomotion orientation preferred the forceful "directive" leadership style, and individuals with a stronger assessment orientation preferred the advisory "participative" leadership style. Thus, across different populations and different measures of "forceful" and "advisory" strategic influence styles, Studies 1-3 have found consistent and strong support for higher locomotion relating to a preference for a "forceful" strategic style and higher assessment relating to a preference for an "advisory" strategic style. These results are interesting in themselves, but they also set the stage to test our regulatory fit predictions. Given these distinct strategic preferences, we predicted that subordinates' job satisfaction would be higher when there was a greater fit between their regulatory mode orientation and the leadership style of their supervisor (high locomotion/"forceful" style; high assessment/"advisory" style). These predictions are tested in Study 4.

### STUDY 4

#### Participants

179 members of the police force in Rome, Italy (93 men, 84 women and 2 participants who did not report their gender) participated in the study on a voluntary basis. Their mean age was 41.09 years (S.D. = 9.08). 33 of our participants had elementary education (of 8 years), 123 had high school education (of 13 years) and 23 had college education (of 17-19 years).

#### Procedure

Participants responded to the Locomotion and Assessment Scales described previously, followed by a number of filler questionnaires. In the present sample, the Cronbach  $\alpha$  for the Locomotion Scale was .70 and that for the Assessment Scale was .65. The Cronbach's Alpha of both Locomotion and Assessment Scales is not improved if any item is deleted.

Participants then proceeded to respond to a version of the Path-Goal Leadership Questionnaire described

in Study 3, inquiring this time into the perceived behavior of their supervisors based on the generic question "How often does your supervisor show the following behaviors in her/his everyday interactions with subordinates?", with the response alternatives ranging from 1 (*never*) to 7 (*always*). To test the fit predictions, this study was concerned with participants' answers to the questions about the supervisors' "directive" and "participative" leadership styles. The Cronbach  $\alpha$  for the "directive" style was .67 and for the "participative" style was .87.

Participants subsequently responded to a 2-item job satisfaction measure. The first item derived from the overall job satisfaction measure of Brayfield and Rothe (1951) read "I am fully satisfied with my job" and the second item read "It is hard to imagine that anyone could be satisfied by the type of job I do" (Reversed). Responses to these two items were significantly correlated ( $r = .32, p = .001$ ). Thus, a composite job satisfaction score was computed by summing across responses to each item.

### RESULTS

A summary of descriptive statistics and correlations between all the present variables is presented in Table 7. Again, Locomotion and Assessment were not significantly related to each other ( $r = -.06, n.s.$ ).

The predictions regarding the fit effect on subordinates' job satisfaction as a function of the relation between locomotion versus assessment and forceful "directive" strategic style versus advisory "participative" strategic style were tested by means of a moderated multiple regression analysis (using the product variable approach suggested by Baron and Kenny, 1986; see also Cohen and Cohen, 1983). In this analysis we entered the main effects of locomotion (A), assessment (B), supervisors' "directive" leadership style (C), and supervisors' "participative" style (D) and the interactions between locomotion, assessment and these two supervisory styles as perceived by the subordinates (i.e.,  $A \times C$ ,  $A \times D$ , and  $B \times C$ ,  $B \times D$ ). Results of this analysis are summarized in Table 8.

As predicted, and shown in Table 8, there was a significant positive interaction between subordinates' locomotion orientation and their supervisor's "directive" style ( $\beta = .282, p < .001$ ), indicating that the stronger was the subordinates' locomotion orientation, the more their job satisfaction increased with an increase in their supervisor's "directive" strategic style. Also as predicted, there was a significant positive interaction between subordinates' assessment orientation and their supervisor's "participative" style ( $\beta = .349, p < .000$ ), indicating that the stronger was the subordinates' assessment orientation,

TABLE 7  
Descriptive Statistics and Correlations Between Variables (*Study 4*)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Locomotion	4.51	.55	—			
2. Assessment	3.19	.68	-.06	—		
3. Directive	4.24	1.13	.09	.01	—	
4. Participative	3.96	1.44	-.05	.01	.53***	—
5. Job satisfaction	3.21	1.26	.31***	-.07	.21**	.15*

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

the more their job satisfaction increased with an increase in their supervisor's "participative" strategic style.

These results support our prediction that a fit between subordinates' regulatory mode orientation and their supervisor's strategic influence style would increase their job satisfaction. There is also some evidence that a non-fit between subordinates' regulatory mode orientation and their supervisor's strategic influence style can decrease their job satisfaction. As shown in Table 8, there was a significant negative interaction between the subordinates' assessment orientation and their supervisor's "directive" style ( $\beta = -.277$ ,  $p < .001$ ), indicating that the stronger was the subordinates' assessment orientation, the more their job satisfaction decreased with an increase in their supervisor's "directive" strategic style.

These findings are illustrated via the predicted mean-values exhibited in Table 9. Following the suggestion of Aiken and West (1991) these were values one standard deviation above and below the means of the relevant variables in the regression equation (for a more elaborate discussion of simple slope analysis see Aiken & West, 1991).

## GENERAL DISCUSSION

Locomotion constitutes the aspect of self-regulation that is concerned with movement from state to state, and

assessment constitutes the aspect of self-regulation that is concerned with making comparisons. While a modicum of both assessment and locomotion is essential for any kind of action, there is considerable variability in the degree to which each function is emphasized by particular actors in specific circumstances (Higgins et al., 2003; Kruglanski et al., 2000). Some activities, for example, are routinized to the point of requiring hardly any assessment at all: brushing one's teeth, responding to a casual greeting, jogging, driving along a long stretch of empty highway. These activities come close to involving "pure" locomotion. In other activities, by contrast, assessment plays a major part: planning a move in a chess match, deciding on a house to buy, deliberating a verdict in a court case, and so on. These activities come close to involving pure "assessment".

We have found that individuals vary reliably in the extent to which they emphasize the locomotion or assessment components of activities (see Higgins et al., 2003; Kruglanski et al., 2000). Some individuals seem to be all "action" and relatively little "thought". Others seem to be perennially "buried in thought" without often getting around to the "doing" phase. Such pure "locomotors" or "assessors" are rare, of course, with most people falling somewhere in between the end points of the two dimensions and some people being either high in both or low in both.

What is less obvious is that people's standing on the locomotion and assessment continua has implications not only for how they conduct their own individual

TABLE 8  
Summary of Results of Moderated Regression Analysis on Job Satisfaction (*Study 4*)

Predictor	Beta	<i>p</i> value
Locomotion (A)	.342	.000
Assessment (B)	-.052	.446
Directive (C)	.184	.021
Participative (D)	.065	.428
A × C	.282	.001
A × D	-.016	.848
B × C	-.277	.001
B × D	.349	.000

$F(8, 169) = 7.792$ ,  $p < .000$ ,  $R^2 = .269$

TABLE 9  
Job Satisfaction as a Function of Fit Between Subordinates' Regulatory Mode Orientation and Their Supervisor's Leadership Style: Predicted Mean Value

Leadership Style	Low Locomotion	High Locomotion
Low Directive	2.86	3.04
High Directive	2.64	4.19
	Low Assessment	High Assessment
Low Participative	3.37	2.25
High Participative	2.54	3.40
Low Directive	2.40	2.93
High Directive	3.53	2.74

affairs but also for how they experience interpersonal interactions, such as those found in work organizations that form an important part of most adults' everyday lives. Personal orientations produce preferences for specific strategic ways of getting along in the world. Those with whom people interact in their everyday lives can respond to them in ways that do or do not fit these strategic preferences. The present research illustrated this phenomenon in regard to the fit between subordinates' standing on locomotion and assessment orientations, the strategic preferences associated with these orientations, and the leadership styles of their supervisor.

We posited that regulatory mode orientations should be related to a major distinction in the social power and leadership literatures, namely that between "forceful" (or autocratic) and "advisory" (or democratic) social power bases and leadership styles. Specifically, a strong locomotion orientation should be related positively to the preference for and satisfaction with the "forceful" types of strategic influence, whereas a strong assessment orientation should be related positively to the preference for and satisfaction with the "advisory" types of strategic influence. Our results provide consistent support for these hypotheses. Studies 1–3, using different measures of "forceful" and "advisory" styles of strategic influence, found that individuals with a higher locomotion orientation had a stronger preference for "forceful" leadership, whereas individuals with a higher assessment orientation had a stronger preference for "advisory" leadership. Study 4 found that subordinates' job satisfaction increased when their supervisor used a strategic influence style that fit their regulatory orientation (locomotion/"forceful" style; assessment/"advisory" style).

It is noteworthy that our results exhibit a convergence across different geographic locations, diverse employee populations (including bank clerks (Study 1), firemen (Study 2), employees of an investment firm (Study 3), and members of the police force (Study 4)), as well as two different measures of the "forceful" and "advisory" strategic influence styles [namely, Hinkin and Schriesheim (1989) scale of social power bases, and the Path-Goal Leadership Questionnaire (Indvik, 1985, 1988; Northouse, 1997)]. That our theoretical predictions are consistently supported despite that diversity is testimony to their validity and robustness.

Because regulatory mode theory distinguishes between locomotion and assessment as two types of self-regulatory concerns, the reader may wonder how it relates to the regulatory focus theory distinction between promotion and prevention self-regulatory concerns (Higgins, 1998). The distinction between promotion and prevention is a *between-system* distinction—between a promotion system concerned with accomplishments and aspirations and a prevention system

concerned with security and responsibilities. In contrast, the distinction between locomotion and assessment is a *within-system* distinction. Individuals have locomotion concerns and assessment concerns within the promotion system and within the prevention system (and within other self-regulatory systems as well). Research by Forster, Higgins, and Idson (1998) demonstrates locomotion-related "goal looms larger" effects (stronger strategic responses with movement toward the goal) for both promotion-focused and prevention-focused individuals. Research on self-discrepancy theory (e.g., Higgins, 1998) demonstrates assessment-related self-evaluation effects (i.e., comparison of actual self to an ideal or ought standard) for both promotion-focused (ideal) and prevention-focused (ought) individuals. Thus, the distinction between promotion and prevention concerns is conceptually orthogonal to the distinction between locomotion and assessment concerns. It should also be noted that the concept of regulatory focus strength (e.g., ideal/promotion strength; ought/prevention strength; see Higgins, Shah, & Friedman, 1997) is also orthogonal to the distinction between locomotion and assessment given that a stronger focus is likely to increase *both* locomotion and assessment concerns within that self-regulatory system.

The present findings have implications of both theoretical and practical significance. On the theoretical level, they illustrate the relevance of regulatory mode to understanding how social influence strategies can impact life satisfaction (in this case, job satisfaction) through an interaction with motivational orientations. Social influence phenomena certainly constitute a fundamental aspect of everyday life and our results attest that preferences for different styles of strategic influence are significantly determined by the regulatory modes. In a sense, these results demonstrate that social influence phenomena are inextricably intertwined with issues of motivation and that social influence will be effective to the extent that it corresponds to the recipient's motivational orientations.

It is noteworthy that the relation between social influence style and personal motivation does not seem to constitute a simple effect of need fulfillment or need satisfaction. It is *value from fit* rather than *value from outcome* (see Higgins, 2000, 2005) that seems to matter. It is not the case that each social influence style produces outcomes like salary increases or job promotions that satisfy the employee's job goals. Instead, it is the fit between subordinates' locomotion or assessment orientation and the strategic influence style of their superior that increases the value of the job activities themselves, hence impacting the employees' job satisfaction. This is a different kind of "worker-climate" fit than has been examined in the organizational literature (see, for example, Ostroff, 1993; Schneider, 1972).

Other kinds of "fit" involving regulatory modes could be examined in future research. Regulatory modes represent particularly broad motivational orientations that are applicable to virtually all activities an organization may be required to perform. Hence, a fit between a leader's regulatory mode and that of the subordinates could be of particular importance for workers' general morale and maximal satisfaction. Of course, morale and satisfaction alone do not guarantee an organization's optimal functioning. Another major determinant of functional optimality is a fit between the employees' (including supervisors as well as subordinates) regulatory mode and the organizational task requirements. Thus, a regulatory mode match between the agents of influence (i.e., leaders/supervisors) and its recipients may constitute a necessary but not sufficient condition for organizational effectiveness.

In the present research, we have treated regulatory mode as an individual difference variable that can be measured with appropriate scales. According to regulatory mode theory (Higgins et al., 2003; Kruglanski et al., 2000), however, regulatory mode differences may be induced situationally as well. Indeed, the study by Avnet and Higgins (2003) described earlier experimentally induced either a locomotion or an assessment orientation by asking participants to think about times in their past when they had either a strong locomotion orientation or a strong assessment orientation. In a second, ostensibly unrelated study, they selected a reading light from among a set of alternatives using either a "progressive elimination" strategy (which fits locomotion but not assessment) or a "full comparison" strategy (which fits assessment but not locomotion). When given the chance to buy the light those chose (which was arranged to be the same light for everyone), participants in the fit conditions offered over 40% more money to buy the lamp than participants in the non-fit conditions. The fact that situations can also induce regulatory mode states suggests that different organizational environments themselves can induce either locomotion or assessment orientations that would then require different leadership styles and social power bases for effective management and employee satisfaction. This possibility could be fruitfully pursued in subsequent research.

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