



# Time perspective as an antecedent of trust in a manager and its impact on employee attitudes

**Ritu Gupta**

IBS Hyderabad, IFHE University, India

**Douglas A Hershey**

Oklahoma State University, USA

## Abstract

A manager's personality has been demonstrated to have an influence on employees' level of trust. However, it has yet to be demonstrated whether trust levels are based, in part, on a manager's time perspective. In this study a between-subjects scenario-based experimental approach was employed, which involved administration of six different scenarios. Each described a hypothetical manager who exhibited one of six time perspectives: past positive, past negative, present hedonistic, present fatalistic, future oriented, and balanced. Participants ( $N = 630$ ) rated the extent to which the manager could be trusted and what they believed their attitude would be if they were to work for the individual. Findings revealed that managers who exhibited a past positive, future oriented, or balanced time perspective were perceived to be more trustworthy and had higher ratings of trust than supervisors with a past negative or present fatalistic orientation. A path analysis model further demonstrated that employee perceptions of trustworthiness (an antecedent of trust) covary with time perspective, as did employee attitudes (a trust-linked outcome). This research contributes to the development of theory by shedding light on the way interpersonal perceptions shape employee attitudes. From an applied perspective, the findings suggest interpersonal perceptions influence workers' attitudes toward their manager and their job.

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## Corresponding author:

Douglas A Hershey, Oklahoma State University, 116 North Murray Hall, Stillwater, OK 74074, USA.

Email: [douglas.hershey@okstate.edu](mailto:douglas.hershey@okstate.edu)

**Keywords**

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Time perspective is a personality trait that not only influences one's behavior, but also shapes one's judgments, decisions, and actions (Gupta et al., 2012; Lewin, 1951; Nuttin and Lens, 1985; Zimbardo and Boyd, 1999). It has also been suggested that there exist different types of time perspectives (Zimbardo and Boyd, 1999), which may differentially shape an employee's perceptions of his or her supervisor, depending on the nature of the trait displayed. Perceptions of time perspective are potentially important in the workplace because employees' trust in a manager is influenced by the supervisor's personality, which in turn, has an influence on employee attitudes and performance (Brower et al., 2000; Politis, 2003; Simons, 2002). Furthermore, because different time perspectives are associated with particular types of behaviors and personal characteristics, it is important, from a theoretical perspective to explore managerial time perspective as a way of extending current theories of leadership efficiency. And from an applied perspective, it is crucial for firms to take into consideration how a manager's time perspective influence employees' perceptions of trust, inasmuch as those perceptions covary with workplace attitudes and performance (Carr et al., 2010; Colbert et al., 2004; Janssen and Van Yperen, 2004; Kark and Van Dijk, 2007; Loi et al., 2006; Mayer et al., 1995; Michel and Bowling, 2013).

In the present experimental investigation, we examine how different time perspectives shape perceptions of trust in a hypothetical manager, and how those perceptions, in turn, result in differences in employee attitudes. In the following section of the paper, we explore the existing literature on three psychological constructs this study rests upon, namely trust, trustworthiness, and time perspective.

**Literature review***Trust and trustworthiness*

Mayer et al. (1995) define trust as a situation in which a trustor (the person who trusts) is vulnerable to a trustee (the person trusted). There is an underlying expectation by the trustor about support from the trustee, which implies that in a trusting relationship one person monitors the welfare of another. As a construct, trust has been used as a synonym for actions like cooperation, risk taking, and making choices (e.g. Deutsch,

1958; Kee and Knox, 1970). And while it is the case that trust can lead to cooperative behavior (McAllister, 1995), trust itself is not a necessary antecedent to cooperation, particularly in situations in which neither individual is vulnerable or at risk (Mayer et al., 1995).

In one empirical investigation, employees' perceptions of managerial trust were shown to be largely based on the perceived ability, benevolence, and integrity of a manager (Mayer et al., 1995). These three characteristics are collectively considered *trustworthiness factors*, which from a theoretical perspective are posited to be antecedents of trust. In an empirically based follow-up investigation, Mayer and Gavin (2005) assessed the relationships among the three trustworthiness factors, trust in an immediate manager, workplace performance, and organizational citizenship behavior. The authors operationalized ability as perceptions of the trustee's "skills and competencies in the domain of interest." Benevolence was operationalized as the "trustor's . . . perception [that] the trustee cares about the trustor." And integrity was defined as the "perception that the trustee adheres to a set of principles that the trustor finds acceptable" (p. 874). The researchers found that scores on all three trustworthiness measures were positively related to both trust in one's immediate manager and workplace performance.

A number of studies have examined the nature of trust between a manager and his or her subordinates. Simons (2002) has argued that a manager's personality primarily influences employees' perceived level of trust, and those perceptions result in better or worse employee workplace performance based on the extent to which the manager is perceived to be trustworthy. Along similar lines, Brower et al. (2000) used Leader Member Exchange (LMX) theory as a springboard for understanding the nature and quality of dyadic interactions between employees and leaders. According to theory (Graen, 1976; Graen et al., 1982; Graen and Uhl-Bien, 1995), leaders (sometimes unconsciously) formulate in-groups and out-groups on the basis of multiple factors such as the perceived skill, loyalty, and trustworthiness of the employee. In developing their model, Brower et al. (2000) analyzed theories of leader trust from two different perspectives: from the leader-to-subordinate perspective and from the subordinate-to-leader perspective. These investigators hypothesized that the antecedents of both LMX theory and trust are similar, inasmuch as both involve leader (subordinate) perceptions of the abilities, benevolence, and integrity of the subordinate (leader). Their model further posits that a trusting relationship between a manager and his or her subordinate leads to increased satisfaction, organizational commitment, and positive workplace citizenship behaviors on the part of the employee, which can collectively be thought of as the subordinate's workplace attitude.

In sum, the literature described above suggests that the relationship between a manager and his or her subordinate is a dynamic one, which is strongly based on a multifaceted set of interpersonal perceptions. Central to these person perceptions are the perceived level of ability, benevolence, and integrity of the other.

### *Time perspective*

Early work on the topic of time perspective started with Lewin (1951), who defined the construct as stemming from an individual's social background and motivational pressures. Later, Nuttin (1984; also Nuttin and Lens, 1985) posited time orientation was a variable that influences individual's plans and goals. Lennings and Burns (1998) defined time perspective as the ability to learn from the past and think about the future, both of which have an influence on behavior. Further, Zimbardo and Boyd (1999) suggested time perspective is a psychological phenomenon that partitions human experience into past, present, and future frames. Mowen (1999; see also Hershey and Mowen, 2000) takes the perspective that orientation to time is a personality trait that stems, in part, from a limited set of elemental personality traits that are similar to the well-known "Big Five" personality dimensions (McCrae and Costa, 1987). More recent work has also implicated future time perspective as a determinant of individuals' thoughts, attitudes, and behaviors (Earl et al., 2015; Karkoulian and Osman, 2009; Zhang and Howell, 2011). One clear commonality to these various views of time perspective is that an individual's temporal orientation structures and guides behavior.

Different theoretical views of time perspective have emerged over the past three decades. The theory that has arguably garnered the most attention, however, is the one proposed by Zimbardo and colleagues (e.g., D'Alessio et al. [2003], Sircova et al. [2007], Stolarski et al. [2015], Zimbardo and Boyd [1999] and Zimbardo et al. [1997]). Zimbardo's theoretical model posits the existence of five different time perspectives, each of which are simultaneously present (in differing amounts) in an individual, with one perspective typically being dominant over the others. Zimbardo and Boyd (1999) identifies these five orientations to time as being: past positive, past negative, present hedonistic, present fatalistic, and future oriented. A description of each of these five basic dimensions and their dominant characteristics is found in Table 1 (Gupta et al., 2012). According to Zimbardo and Boyd, being rooted in just one of the five orientations can be disadvantageous, even harmful, depending on the situation or context in which one finds oneself. On that basis, a sixth orientation was proposed—a balanced time perspective—which can be thought of as an amalgam of the

**Table 1.** Summary of time perspective dimensions as described by Zimbardo and colleagues.

|                                |  |
|--------------------------------|--|
| Past positive orientation      | These individuals construct their view of the past as glowing, positive, and nostalgic. Past-positive individuals tend to exhibit high levels of self-esteem and happiness and they tend to have a healthy outlook on life. This orientation is generally thought of as the opposite of the past-negative orientation.   |
| Past negative orientation      | These individuals tend to have a pessimistic, negative, or aversive attitude toward the past. It is associated with feelings of depression, anxiety, low self-esteem, self-reported unhappiness, and aggression.   |
| Present hedonistic orientation | These individuals are oriented toward enjoyment, pleasure, and excitement in the present. They do not believe in making sacrifices in the present for rewards that may be earned in the future. Present-hedonistic individuals show a low preference for consistency, low levels of impulse control, and they often search for novelty in their lives by engaging in sensation-seeking activities.   |
| Present fatalistic orientation | These individuals believe that the future will not only be negative, but its nature is predestined. That is, present-fatalistic individuals believe that the future cannot be changed on the basis of their actions. They believe fate plays a major role in determining one's experiences, and therefore, they rarely think far beyond the present. Moreover, present fatalistic individuals tend to score high on measures of depression, anxiety, and aggression. |
| Future orientation             | Future-oriented individuals actively plan for and strive to meet future goals; therefore, they see themselves as achievers. These individuals tend to be conscientiousness, have a preference for consistency, and they are reward dependent. Future-oriented individuals generally avoid novelty, sensation seeking, aggression, impulsivity, risk taking, and behaviors that are antithetical to their future success.   |

(continued)

**Table 1.** Continued.

|                           |   |
|---------------------------|---|
| Balanced time perspective | Individuals who exhibit a balanced time perspective adapt to different situations and contexts by adopting one of the time perspectives listed above. Not rooted in any single perspective, balanced individuals adjust their cognitive and behavioral responses to the constraints and opportunities called upon by the situation. Those with a balanced time perspective are considered generally well adjusted and exhibit a predominantly positive orientation to life. |
|---------------------------|---|

Sources: Gupta et al. (2012) for descriptions of the first five entries in table; Zimbardo and Boyd (1999) for the balanced time perspective entry.

five others. Having a balanced time perspective suggests the ability to adaptively shift from one time orientation to another on the basis of different situational demands, personal resources, and task features (Zimbardo and Boyd, 1999). Recent empirical work suggests that a balanced perspective is associated with general well-being and a positive orientation (Sobol-Kwapinska and Jankowski, 2016). One additional type of time perspective—the future-transcendental perspective—has also been suggested by Boyd et al. (2006). However, given the spiritual nature of this time perspective dimension it is not viewed as particularly relevant to the focus of the present paper, and therefore, is not considered further.

As each individual is different, and every person is believed to be anchored in one of the six qualitatively different time perspectives identified above (Bonniwell and Zimbardo, 2003; Lennings and Burns, 1998), it is important to understand the influence one's dominant time perspective has on others. This is particularly true in organizational contexts and, more specifically, contexts involving managers and subordinates, as a manager's time perspective stands to shape not only employee perceptions of the leader, but also employee's workplace attitudes and behavior.

The six different time perspectives posited to exist by Zimbardo and colleagues could be expected to manifest themselves among managers in a variety of different ways. For instance, a future-oriented manager might be expected to not only have a clear vision of where his or her department is headed, but also be good at making lists and keeping projects on track. The past positive leader, in contrast, might be expected to frequently reflect upon successes achieved by his or her work unit, and use what was learned from those experiences to shape new policies and practices. Past negative managers would be expected to be just the opposite, that is, by exhibiting an undue focus on previous failures experienced by members of the work unit,

they could be expected to be anxious about successfully completing projects. The present hedonistic supervisor is likely to be easily distracted when completing tasks, finding ways to circumvent work commitments in favor of activities work group members might find enjoyable. The present fatalist would predictably be disparaging of new policies and practices, seeing proposed change as inherently problematic and doomed to fail. The leader with a balanced time perspective could be expected to exhibit any and all of the above, but each at a time or place that is appropriate to the situation. Only one example is given above for each orientation to time; in practice, however, the impact of time perspective on managerial workplace behaviors would be expected to be much more far reaching, affecting a broad range of a supervisor's perceptions, attitudes, and actions.

### *Present investigation*

The theoretical framework for the present investigation rests on dual pillars. The first is the research on person perceptions of manager/subordinate trust, which finds its roots in the LMX and social psychological literatures. From an employee perspective, this line of work suggests both antecedents and consequences of trust in a manager. Antecedents include the trustworthiness of the manager, based on his or her ability, benevolence, and integrity (cf. Brower et al., 2000; Poon, 2013). Consequences of trust in a manager, in turn, have implications for employee attitudes, including worker commitment to the manager, satisfaction with the manager, motivation in working for the manager, and turnover intent (Brower et al., 2000; Connell et al., 2003; Grant and Sumanth, 2009; Matzler and Renzl, 2007).

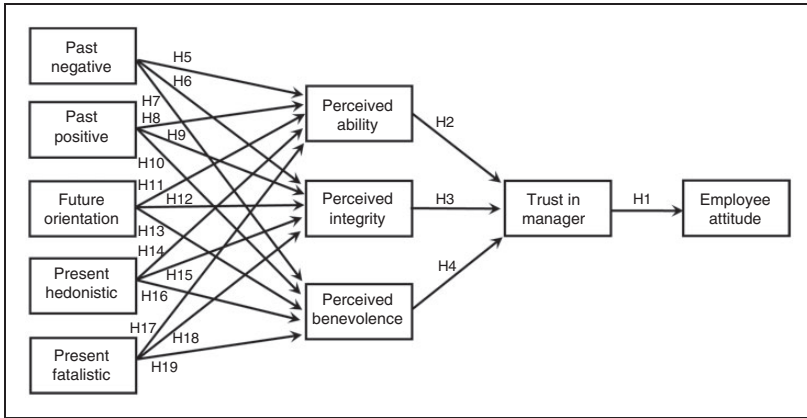
The second pillar of the theoretical framework derives from the psychological literature on time perspective. This work posits that one's orientation(s) to time is not only complex and multifaceted, but it derives from experience and is subject to situational demands. In this investigation we align ourselves with Zimbardo's theory of time perspective (Zimbardo and Boyd, 1999), which implies that every manager possesses a dominant time perspective that can readily be perceived by his or her subordinates. Our thinking is also consistent with that of Mowen (1999), who suggests that time perspective is a relatively stable personality trait that endures over time. Thus, it is theoretically tenable to assume that the unique constellation of personality characteristics and behaviors that are associated with a manager's time perspective (described in the preceding section) give rise to perceptions of trustworthiness and trust, and the latter dimension (trust) gives rise to employee attitudes. A conceptual model based on this theoretical framework is described below, which represents the relationships between constructs outlined in the literature review.

Each participant in this investigation was asked to read a scenario, which described a hypothetical manager who exhibits one of Zimbardo and Boyd's (1999) five basic time perspectives or a sixth balanced time perspective as proposed by Boniwell and Zimbardo (2003). Respondents were then asked to rate their perceptions of the hypothetical manager in terms of trustworthiness and trust, as well as how they would feel about having the manager as a supervisor (employee attitude). Consistent with this methodological approach, the study had two major empirical objectives.

The first objective was to assess mean ratings for the managerial trust dimensions (trustworthiness and trust) and employee attitudes as a function of the hypothetical manager's time perspective. We predict that mean scores for the trust, trustworthiness, and employee attitude dimensions will be (relatively) larger for three of the time perspective conditions (i.e. past positive, future oriented, and balanced) and (relatively) smaller for two of the time perspective conditions (i.e. past negative and present fatalistic). The three arguably more positive orientations to time are considered as such, because individuals who exhibit these orientations differentially engage in more positive behaviors, such as not smoking, being planning oriented, having high levels of energy and happiness, and engaging in other types of health promotion practices (Hamilton et al., 2003; Petkoska and Earl, 2009; Webster and Ma, 2013; Zhang et al., 2013; Zimbardo and Boyd, 1999). The two arguably negative orientations to time (i.e. past negative and present fatalistic) are considered as such on the basis of findings that demonstrate individuals who exhibit these perspectives are prone to negative mood states and behaviors, such as anxiety, depression, procrastination, substance abuse, drug dependence, pathological gambling, and low levels of emotional stability and conscientiousness (Breier-Williford and Bramlett, 1995; Ferrari and Díaz-Morales, 2007; Gupta et al., 2012; MacKillop et al., 2006; Zimbardo and Boyd, 1999). Equivocal findings have been observed regarding the positivity/negativity of individuals with a present hedonistic time perspective; therefore, no a priori predictions are made regarding the magnitude of mean scores for the manager who exhibits this orientation to time.

The second empirical goal of this article was to test the conceptual model shown in Figure 1. The arrangement of variables from left to right across the diagram illustrates how the dominant time perspective of a manager is posited to be associated with perceptions of his or her trustworthiness, which in turn is hypothesized to predict manager trust. Perceived trust levels are then posited to predict the quality of an employee's attitude. The rationale for each of the 19 hypotheses contained in the conceptual model is provided below.





**Figure 1.** Hypothesized path model of the antecedents and a consequence of trust in a manager.

*Path model hypotheses.* The path diagram shown in Figure 1 is framed as a full mediation model, in which indicators at each hierarchical level are posited to be fully mediated by indicators at adjacent levels. Hypotheses will be tested using traditional, multistage regression-based path analysis techniques (Streiner, 2005). In doing so, the time perspective indicators will be dummy coded using a balanced time perspective as the reference condition, to examine the impact each of Zimbardo and Boyd's (1999) five basic orientations have on the various endogenous variables in the model. The balanced time perspective was specifically chosen as the reference category because, as an amalgam of the others, it would seem to be the most theoretically neutral of the time perspective set, thereby arguably serving as the best comparison condition.

On the basis of the theoretical discussion involving trust, trustworthiness, and time perspective described earlier in the introduction, we reach the set of empirical hypotheses outlined below.

H1 specifies that trust in the hypothetical manager will be positively related to employee attitudes, which is consistent with the findings from work by Ferrer et al. (2004) and Mayer and Davis (1999). Further, on the basis of the theoretical model developed by Mayer and Davis (1999), H2–H4 specify that the three trustworthiness factors (ability, benevolence, and integrity) will be positively related to ratings of managerial trust. We further predict that the time perspective conditions included in the model will have a direct effect on the trustworthiness variables (H5–H19). The empirical or theoretical basis for the valence of these 15 effects is outlined below.

Based on previous empirical findings (e.g. Hamilton et al., 2003; Petkoska and Earl, 2009; Webster and Ma, 2013; Zhang et al., 2013; Zimbardo and Boyd, 1999), our working assumption was that relative to the reference time perspective condition in the path model (i.e. a balanced time perspective) two of the orientations to time (past positive and future) will be positively related to the three managerial trustworthiness variables. Thus, we anticipate that path coefficients for H8 through H13 will carry positive valences. Furthermore, on the basis of other empirical findings (i.e. Breier-Williford and Bramlett, 1995; Ferrari and Díaz-Morales, 2007; Gupta et al., 2012; MacKillop et al., 2006; Zimbardo and Boyd, 1999), relative to the balanced orientation reference condition, the two negative time perspective dimensions (past negative and present fatalistic) are posited to be negatively related to the trustworthiness indicators (H5–H7 and H17–H19).

It is more difficult to make a priori predictions regarding perceptions of trustworthiness for the present hedonistic condition (H14–H16). That is because individuals who possess a present hedonistic orientation exhibit a combination of positive traits (including high levels of energy, planning, and low levels of stress; Gupta and Gaur, 2011; Petkoska and Earl, 2009; Zimbardo and Boyd, 1999) and negative traits (such as low levels of emotional stability and high levels of procrastination; Ferrari and Díaz-Morales, 2007; Zimbardo and Boyd, 1999). For this reason, and also due to the fact that no prior investigations have examined present hedonists in relation to trustworthiness, we treat H14–H16 as exploratory in nature.

## Method

### *Participants*

The sample for this study included 751 Indian adults. Of these, 121 individuals failed to complete the questionnaire and were excluded from the analysis. Hence, the final sample was comprised of 630 respondents, which included 349 males (55.4%) and 281 females (44.6%). Respondents ranged in age from 20 to 59 years ( $M = 37.46$ ,  $SD = 11.63$ ) and they had completed 17.4 years of education ( $SD = 1.28$ ), on average. All participants were employed at the time of testing, with a mean job tenure of 14.16 years ( $SD = 11.16$ ; min. = 1 year, max. = 38 years). The mean monthly income of the sample was \$716 U.S. dollars ( $SD = \$421$ ) or 51,183 Indian rupees ( $SD = 28,126$ ). Some 57.1% of the sample reported being married at the time of testing; the remaining respondents were either single (37.9%), divorced (3.0%), or widowed (1.9%).

### *Sampling approach*

All respondents were employees of major information technology (IT) companies in India. One reason individuals in this employment sector were selectively sampled was because IT positions are based on formal (i.e. contractual) work arrangements. This makes these jobs comparable in many respects to positions in major organizations in economically more developed nations. Furthermore, relative to most working adults in India, individuals who work in this industry tend to be more highly exposed to global work practices, and thus, are more likely to encounter employee/manager dynamics commonly found in other parts of the world. To ensure respondents would actually be familiar with employee/manager workgroup dynamics, all study participants were required to have completed at least six months in their position.

To facilitate the data collection process, the human resource directors for 12 IT companies were asked to electronically request that their employees allocate a modicum of time to the project. All companies contacted were located in large metropolitan city centers including Delhi, Bangalore, Kolkata, Pune, Mumbai, and Hyderabad. Workers who chose to participate in the study did so by accessing it via a link to the SurveyGizmo.com website. All participants completed the measure voluntarily and without remuneration.

### *Measures*

The scales and measures used in this study are described below. However, before describing the set of perceptual and attitudinal measures, the approach used to create the scenario-based manipulation of manager's time perspective is outlined.

*Manager's time perspective.* As an experimental component of this investigation, six different scenario-based time perspective conditions were developed, each of which briefly describes a manager that exemplifies a different orientation to time. Five of the conditions were based on the orientations suggested by Zimbardo and Boyd (1999), that is, past positive, past negative, present hedonistic, present fatalistic, and future orientation. The sixth condition was based on a manager who exhibited a balanced time perspective (cf. Boniwell and Zimbardo, 2003). This last scenario was constructed in such a way as to exemplify a blended combination of the other five orientations to time.

Beyond describing the manager's orientation to time, scenarios were written so as to conceal individual difference dimensions such as the

manager's gender, age, and specific type of organization. This was done to eliminate the possibility of these dimensions biasing participants' responses. The six scenarios were then pilot tested using a sample of 70 individuals to ensure that each scenario was perceived as theoretically intended. The appendix contains the verbatim text for each of the six scenarios after minor wording modifications had been made to improve clarity and content.

Each scenario was two paragraphs in length, with the first (stem) paragraph being common to all six. The stem paragraph was designed to describe to participants the hypothetical workplace context. The second paragraph, in contrast, provided the respondent with information about the characteristics of the hypothetical manager in such a way as to convey information about the supervisor's dominant time perspective.

**Trust in manager.** Trust in the hypothetical manager was assessed using a scale that contained 10 items, which was developed by Mayer and Gavin (2005). A sample item from this scale is "*If Manager X asked why a problem happened you would speak freely, even if you were partly to blame.*" The measure uses a 5-point (1 = *strongly disagree*; 5 = *strongly agree*) Likert-type response format. This measure has previously been validated and effectively used in a number of other scientific investigations (Brower et al., 2009; Frazier et al., 2010; Schoorman et al., 2007; Tan and Lim, 2009). Higher scores on this dimension indicate higher levels of trust in the trustee.

**Manager trustworthiness.** Respondents made trustworthiness ratings for the hypothetical manager using a tripartite measure developed by Mayer and Davis (1999). This measure, which is comprised of three separate scales, includes six items that assess a manager's ability (e.g. "*I feel very confident about Manager X's skills.*"), six that tap the manager's integrity (e.g. "*Your needs and desires are very important to Manager X*"), and five items that measure the manager's benevolence (e.g. "*Sound principles seem to guide Manager X's behavior*"). Again, a 5-point (*strongly disagree*; *strongly agree*) response format was used. For all three scales, higher scores indicate higher levels of perceived trustworthiness in the manager.

**Employee attitude.** This 4-item scale was designed to assess employee attitudes in relation to working for the hypothetical manager. The four items were measured using a 5-point (*strongly disagree*; *strongly agree*) Likert-type response format. This scale was designed to tap: (i) commitment toward working for the hypothetical manager, (ii) satisfaction working for the hypothetical manager, (iii) level of motivation working for the hypothetical manager, and (iv) turnover intentions. A sample item from the scale

is “*How committed would you be working for Manager X?*” Higher scores on this measure are associated with a more positive workplace attitude on the part of the employee.

Finally, for classification purposes a set of commonly measured socio-demographic characteristics were assessed for each respondent, including age, gender, educational level, employment sector, marital status, job tenure, and personal monthly income.

### *Psychometric evaluation of measures*

On the basis of recommendations by Anderson and Gerbig (1988), a measurement model was computed to confirm that individual scale items loaded on their hypothesized latent factors. The model was developed using the AMOS v.22.0 structural equation modeling software (Arbuckle, 2014). This computation involved items from all five scales (trust in manager, manager’s ability, manager’s integrity, manager’s benevolence, and employee attitudes). As is often the case when computing a complex measurement model, the first analysis failed to reveal optimal fit indices. By consulting the standardized residual covariances, modification indices, and considering the magnitude of factor loadings, three of the 31 items across the five scales were eliminated; all three were from the 10-item Mayer and Gavin (2005) trust scale. Moreover, one covariance was added to the disturbance terms within the integrity scale and four other covariances were added to residuals within the trust in manager scale. The final confirmatory factor analysis revealed very good fit statistics,  $\chi^2$  (309,  $N=630$ )=955.48,  $p < .01$ , TLI=.93, CFI=.94, RMSEA=.058 (90% CI: .054, .062). Each of the 28 items loaded on its hypothesized dimension and all revealed statistically significant loadings with critical ratio values above 10.0.

Reliability coefficients (Cronbach’s alpha) for the five scales were found to be equal to or exceed 0.80, an outcome that provides empirical support for the cohesiveness of the hypothesized constructs. A Pearson correlation matrix of the five scales used in the study is shown in Table 2, along with mean scores and standard deviations. The rectangular panel at the bottom of the table shows correlations between each of the scales and participants’ age, income, gender, and level of education. As seen in that panel, the sociodemographic measures were found to be unrelated to the five scales.

### *Procedure*

Once a participant accessed the questionnaire using the SurveyGizmo.com interface, he or she was asked to read and electronically sign an informed

**Table 2.** Zero-order Pearson correlations, means, and standard deviations for scales and demographic indicators.

|  | 1    | 2    | 3    | 4    | 5    |
|--|------|------|------|------|------|
| 1. Trust in manager                          | –    |      |      |      |      |
| 2. Manager's ability                         | .64* | –    |      |      |      |
| 3. Manager's integrity                       | .65* | .65* | –    |      |      |
| 4. Manager's benevolence                     | .66* | .75* | .72* | –    |      |
| 5. Employee attitude                         | .56* | .77* | .57* | .69* | –    |
| Mean   | 3.07 | 3.22 | 3.07 | 3.25 | 3.14 |
| Standard deviation                           | 0.68 | 0.86 | 0.79 | 0.79 | 1.02 |
| <i>Correlations w/demographic indicators</i> |      |      |      |      |      |
| Age  | .02  | –.05 | .04  | –.01 | –.04 |
| Monthly income                               | .02  | –.05 | .03  | .03  | –.04 |
| Gender                                       | –.03 | –.07 | –.05 | –.06 | .01  |
| Years of education                           | .01  | .03  | –.01 | .00  | .02  |

Note: Values marked with an asterisk (\*) are significant at the .01 level.

consent agreement. After doing so, the respondent was asked to carefully read one of the six descriptions of a hypothetical manager. Following exposure to this stimulus passage, respondents were asked to rate (i) their trust in the manager, (ii) the three trustworthiness scales, and (iii) items that tapped their attitude toward working for the manager. Respondents also reported values for the seven demographic items, described above. At the close of the study all participants were fully debriefed in writing.

## Results

### *Mean score comparisons*

Mean scores for five constructs—the three trustworthiness variables, trust in manager, and employee attitude—were examined as a function of the six managerial time perspectives. Table 3 presents these means, standard errors, and the results of post hoc comparisons using Tukey's honest significant difference (HSD) test. ANOVAs for all five dependent variables revealed statistically reliable outcomes. Specifically, the test for trust in the hypothetical manager was found to be significant,  $F(5, 624) = 17.97$ ,  $p < .01$ , as were tests for the manager's perceived ability

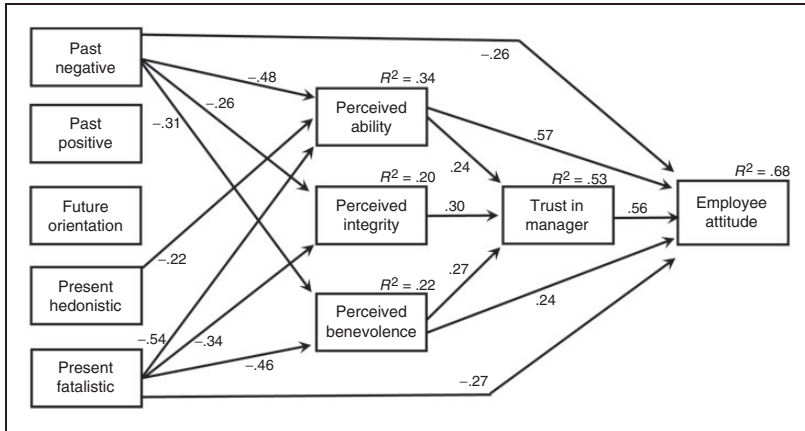
**Table 3.** Mean scores and standard errors (in parentheses) for the five scales in the study shown as a function of the six managerial time perspectives.

|                       | Past<br>Positive            | Past<br>Negative              | Present<br>Hedon.           | Present<br>Fatal.           | Future<br>Persp.              | Balanced<br>Persp.          |
|-----------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|
| Trust in manager      | 3.20 <sup>a</sup><br>(.063) | 2.76 <sup>b</sup><br>(.063)   | 3.26 <sup>a</sup><br>(.063) | 2.69 <sup>b</sup><br>(.062) | 3.19 <sup>a</sup><br>(.061)   | 3.27 <sup>a</sup><br>(.061) |
| Manager's ability     | 3.53 <sup>c</sup><br>(.069) | 2.60 <sup>a</sup><br>(.070)   | 3.20 <sup>b</sup><br>(.070) | 2.47 <sup>a</sup><br>(.069) | 3.70 <sup>c</sup><br>(.067)   | 3.72 <sup>c</sup><br>(.068) |
| Manager's integrity   | 3.54 <sup>c</sup><br>(.070) | 2.71 <sup>a,b</sup><br>(.070) | 3.39 <sup>c</sup><br>(.070) | 2.56 <sup>a</sup><br>(.069) | 2.94 <sup>b</sup><br>(.068)   | 3.27 <sup>c</sup><br>(.068) |
| Manager's benevolence | 3.60 <sup>d</sup><br>(.069) | 2.92 <sup>b</sup><br>(.069)   | 3.30 <sup>c</sup><br>(.069) | 2.61 <sup>a</sup><br>(.068) | 3.46 <sup>c,d</sup><br>(.067) | 3.58 <sup>d</sup><br>(.067) |
| Employee attitude     | 3.58 <sup>c</sup><br>(.079) | 2.37 <sup>a</sup><br>(.080)   | 3.15 <sup>b</sup><br>(.080) | 2.19 <sup>a</sup><br>(.078) | 3.59 <sup>c</sup><br>(.077)   | 3.88 <sup>c</sup><br>(.077) |

Note: Post hoc comparisons (Tukey's HSD) were carried out based on separate ANOVA models calculated for each of the five variables in the left column of the table. Values that share the same superscript are *not* significantly different from one another.

( $F[5, 624] = 65.16, p < .01$ ), integrity ( $F[5, 624] = 31.83, p < .01$ ), and benevolence ( $F[5, 624] = 34.39, p < .01$ ). The omnibus test for employee attitude also exceeded the significance threshold,  $F(5, 624) = 79.86, p < .01$ .

Looking across rows (variables) in Table 3, mean scores that *share* the same superscript were *not* found to differ from one another at the .05 level of significance. Post hoc comparisons revealed two common patterns of effects. The first general pattern observed, which is consistent with a priori predictions, was that the three positive time perspective orientations (past positive, future oriented, and balanced) resulted in higher scores across variables than the three remaining conditions. The second observed pattern of effects, which is also consistent with predictions, was that the two arguably negative orientations (past negative and present fatalistic) resulted in the lowest mean scores across the five sets of comparisons. The magnitude of mean scores for the present hedonistic condition—for which no a priori hypotheses were made due to previous equivocal findings—was typically between mean scores for the positive orientations (high scores) and negative orientations (low scores). Interestingly, participants who received the balanced time perspective scenario generated the highest mean rating for employee attitude, although this value (i.e. 3.88) was not significantly larger than the attitudinal means for the past positive and future orientation conditions.



**Figure 2.** Observed path model of antecedents and a consequence of trust in a manager. The five time orientations are dummy coded using balanced time perspective as the reference category. Path parameters are standardized beta weights (all shown are  $p < .05$ ).

### Path model analysis

A multistage (i.e. layered) path analysis (Ahn, 2002; Streiner, 2005) was computed to test the conceptual model shown in Figure 1. This involved the calculation of five separate hierarchical regression models—one for each endogenous variable. The path diagram shown in Figure 2 graphically displays the results of those analyses. Depicted in the figure are the 10 variables (five endogenous, five exogenous), standardized beta weight values, and  $r$ -squared values for each endogenous construct. All paths shown in the model are statistically significant at the .01 level. To clarify the path model and distinguish between nominally significant and empirically meaningful paths (Kirk, 1996), paths carrying standardized beta weights between  $-0.15$  and  $+0.15$  have been omitted from Figure 2.

In the first analysis, employee attitude was regressed on three sets of predictors: (1) ratings of respondents' trust in the hypothetical manager; (2) perceptions of the ability, integrity, and benevolence of the hypothetical manager; and (3) the hypothetical manager's time perspective as manipulated via the scenarios. The latter set of predictors included five dummy-coded time orientation variables shown on the far left side of Figure 2, with a balanced time perspective serving as the reference.

The first hierarchical level of the analysis was statistically significant,  $F(1, 628) = 288.40$ ,  $p < .01$ , with 68% of the variance accounted for in the



criterion. In support of H1, the standardized beta weight for the path between trust in manager and employee attitude was .56 ( $p < .01$ ). However, contrary to predictions, the change in variance associated with the second and third hierarchical levels (trustworthiness items and time perspective dummy variables) was also both statistically significant, revealing that indicators at both levels had direct effects on the attitudinal measure over and above any indirect effects mediated through trust. At the second level, both perceived ability and perceived benevolence were significant,  $F(3, 625) = 175.53$ ,  $p < .01$ ,  $R^2_{\Delta} = .31$ , with positive standardized beta coefficients of .57 and .24, respectively. At the third level,  $F(5, 620) = 18.02$ ,  $p < .01$ ,  $R^2_{\Delta} = .05$ , significant negative pathways were found to emerge from the past negative and present fatalistic time perspectives to employee attitude ( $\beta = -.26$  and  $-.27$ , respectively).

In the second hierarchical regression, participants' ratings of trust in manager were regressed on perceptions of manager's ability, integrity, and benevolence (level one) and the five future time perspective indicators (level two). The first hierarchical level was significant,  $F(3, 626) = 230.67$ ,  $p < .01$ ,  $R^2 = .525$ . In support of H2, H3, and H4, all three trustworthiness indicators were predictive of trust in manager: perceived ability ( $\beta = .24$ ,  $p < .01$ ), perceived benevolence ( $\beta = .30$ ,  $p < .01$ ), and perceived integrity ( $\beta = .27$ ,  $p < .01$ ). Contrary to predictions, the change in variance brought about by the addition of the second hierarchical level of the model was statistically significant,  $F(5, 621) = 2.47$ ,  $p = .03$ ,  $R^2_{\Delta} = .01$ . However, none of the time orientation coefficients were appreciable (Kirk, 1996), and therefore, their paths have been omitted from Figure 2.

For the remaining three (flat) multiple regression models, ability, integrity, and benevolence were independently regressed on the five time orientation variables. The equation for perceptions of manager's ability was significant,  $F(5, 624) = 65.17$ ,  $p < .01$ ,  $R^2 = .34$ . Three of the five time perspective conditions were significantly related to manager's ability. In support of H5 and H17, the two more negative time orientations (past negative and present fatalistic) carried significant negative beta coefficients ( $-.48$  and  $-.54$ , respectively) and the present hedonistic condition also revealed a significant effect ( $\beta = -.22$ ,  $p < .01$ ). H8 and H11, which posited relationships between perceived ability and (a) the past positive orientation, and (b) the future orientation, failed to emerge.

The model for manager's perceived integrity was also statistically significant,  $F(5, 624) = 31.83$ ,  $p < .01$ ,  $R^2 = .20$ . In support of hypotheses H6 and H18, two time perspective variables—past negative and present fatalistic—carried significant path coefficients that exceed the .05 threshold. Hypotheses H9 and H12 failed to emerge, demonstrating that the two more positive time perspective conditions (past positive and future oriented) were

unrelated to respondents' integrity ratings, as was H15, which focused on integrity ratings for the present hedonistic manager.

For the last computation, manager's benevolence scores were regressed on the five manager time perspectives. This model was also found to be statistically significant,  $F(5, 624) = 34.40$ ,  $p < .01$ ,  $R^2 = .22$ , again, with the two negative time perspectives (past negative and present fatalistic) revealing reliable effects, thus supporting H7 and H19. Hypotheses H10, H13, and H16 failed to exceed the significance threshold, which reveals that the past positive, future oriented, and present hedonistic time perspective conditions were unrelated to respondents' benevolence ratings.

## Discussion

This experimental study was designed to understand the effects of different time perspective dimensions on employees' perceptions of a hypothetical manager. Toward that end, two separate yet related sets of analyses were carried out. The first focused on perceptions of a hypothetical manager's ability, integrity, and benevolence in relation to six different managerial time perspectives, as well as the way in which a manager's time perspective affects subordinate trust and attitudes. The second set of analyses cast these same five variables into a theoretically grounded path model in which trust in a manager was hypothesized to mediate relationships between antecedents (including time perspective dimensions and perceptions of trustworthiness), and a consequence—employee attitudes. Findings revealed that a hypothetical manager's time perspective—particularly those that would ordinarily be perceived to be negative—had an appreciable influence on subordinate perceptions, attitudes, and beliefs.

The analysis of mean score differences revealed a consistent pattern of effects across all five constructs in the investigation. Omnibus  $F$ -tests for all five variables emerged as statistically significant in relation to the time perspective manipulation. Consistent with predictions, hypothetical managers who exhibited a negative time perspective (past negative; present fatalistic) were negatively perceived in terms of the set of four trust and trustworthiness dimensions, and managers who exhibited a positive orientation to time (past positive, future oriented, and balanced) were positively regarded. With all but one exception, trust-related means for the positive time orientation dimensions were above the rating scale midpoint and means for the negative dimensions were below the scale midpoint. Moreover, mixed perceptions were revealed for the manager who exhibited the present hedonistic personality type, with means on this dimension typically falling between observed scores on the positive and negative dimensions.

Findings from the theoretically grounded path model shown in Figure 2 provide complementary findings regarding the impact of managerial time perspective on employee attitudes. Two sets of paths from the model served to replicate findings that have previously appeared in the literature. The first was that ratings of manager trust were found to be positively related to employee attitudes, which is consistent with findings from Flaherty and Pappas (2000) and the model of relational leadership advanced by Brower et al. (2000). Also in line with published findings from Mayer et al. (1995) and Mayer and Gavin (2005), the three trustworthiness dimensions (ability, integrity, and benevolence) were found to predict participant ratings of trust in the hypothetical manager. Although these effects are consistent with existing theory, they extend the empirical base in this research area by demonstrating that the relationships between perceived managerial trustworthiness, trust, and employee attitudes generalize to workers in India.

Continuing with the path model, findings regarding the relationships between the time perspective dimensions and the trust/attitudinal constructs served to extend empirical work in the field. Two managerial orientations to time—the past negative and present fatalistic personality types—were found to be inversely related to employee attitudes when the reference group was managers with a balanced time perspective. Similarly, coefficients for the two negative time orientations were found to be inversely related to all three managerial trustworthiness dimensions. This suggests that a manager high on the past negative or present fatalistic dimension will be more poorly perceived by their subordinates relative to a manager who possesses a balanced orientation to time; and accordingly, managers perceived to be low on the three trustworthiness dimensions can expect to engender low levels of employee trust. These results suggest it is detrimental for a manager to have a negative time orientation in terms of both trustworthiness variables and employee attitudes, whereas the same cannot be said for managers with a more positive orientation to time. Interestingly, relative to the (balanced) reference category, the past positive, future oriented, and present hedonistic conditions were not found to be systematically related to the trustworthiness, trust, or attitudinal constructs. The one exception to this observation involved the finding of a negative relationship between the present hedonistic condition and manager's perceived ability.

### *Theoretical and applied contributions*

From a theoretical perspective, this investigation stands to make unique contributions to the literatures in management science and psychology. In terms of the former, this study advances our understanding of the

characteristics that make some managers more trusted than others, and thus, more effective. Research on the importance of the dispositional and personality characteristics of managers is not new (Church and Waclawski, 1998; Nikolaou, 2003); however, we were unable to identify any studies that have specifically focused on time perspective as a determinant of employees' perceptions of their manager. Use of the (scenario-driven) social-cognitive methodology to study relational leadership dynamics in a workplace setting proved fruitful, which is an approach management theorists have advocated in order to understand supervisor–subordinate perceptions (Brower et al., 2000; Martinko and Gardner, 1987).

This investigation also serves to extend LMX theory (Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995), by identifying time perspective-based antecedents of the trustworthiness dimensions that underlie trust in a manager. Whitener et al. (1998) suggested that organizational, relational, and individual factors all contribute to perceptions of trustworthiness in a manager. Time perspective, as a managerial personality dimension, falls into the latter of these three categories of antecedents, complementing other individual dimensions such as propensity to trust, self-efficacy, and managerial values (Mayer et al. 1995; Mishra, 1996). The path model that was tested also contributes to theory by revealing that two particular managerial orientations to time—past negative and present fatalistic—have a direct effect on employee attitudes (relative to a balanced time perspective), over and above the indirect effect of the negative orientations as mediated by the trustworthiness and trust dimensions.

This study also contributes to the psychological literature by extending our understanding of orientations to time. To date, most investigations of time perspective as a multidimensional construct have employed a correlational approach. In a typical study, an individuals' orientation to time is assessed and then correlated with some dimension of interest, such as retirement planning (Hershey et al., 2010), substance abuse (Keough et al., 1999), risky driving behavior (Zimbardo et al., 1997), homelessness (Epel et al., 1999), or environmental attitudes (Milfont and Gouveia, 2006). The present investigation is different, in that orientation to time was experimentally manipulated. By casting the six time perspectives as levels of an independent variable, we were able to see how each of the different orientations was systematically related to person perceptions of a supervisor. Based on the robustness of the findings from this study, we would advocate the use of a comparable experimental approach in future investigations.

This study also contributes to an enhanced understanding of balanced time perspective as a driver of individuals' interpersonal perceptions. To present, this highly flexible form of time perspective has received limited empirical attention, presumably in part due to difficulties in determining

how it should be operationalized and measured (see Stolarski et al., 2015; Zhang et al., 2013 for a discussion of approaches to defining “balance”). The findings from this investigation, however, confirm Zimbardo and Boyd’s (1999) belief that individuals with a balanced time perspective are highly regarded, inasmuch as the mean trust, trustworthiness, and employee attitude scores for the balanced hypothetical manager were equivalent to those of the past positive and future-oriented managers. It is important to note, however, that the balanced manager was not more highly regarded than the past positive and future-oriented managers but viewed as equivalent in terms of the workplace dimensions studied.

In addition to the theoretical contributions listed above, the results of this study have clear implications for practice. From an applied perspective, during the personnel selection process it would seem prudent to eliminate from consideration managers with a negative time perspective (i.e. past negative or present fatalistic). Findings suggest that these two types of managers are unlikely to be highly trusted or perceived as trustworthy, which is likely to have negative spillover effects in terms of employee attitudes. The data from this study also demonstrate that the most positively perceived managers are those with a past positive, future oriented, or balanced orientation to time. Thus, one recommendation that follows from this work would be to use a brief time perspective screening measure, such as the one developed by Gupta et al. (2012), during the initial selection process.

Also from an applied perspective, notwithstanding the ongoing debate surrounding the value of managerial training programs (Aragon and Valle, 2013), the results of this study suggest that there could be some payoff in training managers to understand the value of considering problems and decisions from different (time) perspectives. And while it is realistically difficult to train individuals to change long-standing personality traits or to expect them to change naturally (Costa and McCrae, 1994), it would be possible to teach managers to adopt different perspectives when engaged in planning, problem solving, and decision-making situations, in order to cognitively forecast outcomes that they might not otherwise consider.

### *Limitations and future directions*

This study is not without its limitations. One limitation involves the nature of the experimental task, which asked individuals to report their perceptions of the hypothetical manager. These perceptions may or may not reflect actual workplace perceptions and behaviors. Thus, one way to view the findings from this study is as a proof of concept, awaiting real-world confirmation from a well-designed field investigation. Another potential

limitation involves the fact that the observed effects could have been inflated due to common methods variance. This is always a rival explanation for outcomes in situations where a common item response format is used, as was the case in this experiment.

The fact that managerial time perspective was investigated in a single national context with a linear view of time represents another limitation. It has been argued that perceptions of time perspective differ as a function of one's national culture (Mayfield et al., 1997; Zimbardo and Boyd, 2009); that being the case, it would be interesting to examine the generalizability of this study's findings by conducting a replication experiment in other linear time cultures, or in a culture that has a fundamentally different view of time. Another contextually different research direction would involve examining perceptions of managers in business sectors other than the service industry (i.e. the domain used in this investigation), to determine how robust our results are to deviations in organizational format and culture.

## **Conclusion**

Studies of person perception have contributed a great deal to our understanding of interpersonal workplace dynamics. In this investigation, we add to that literature by demonstrating how a managerial personality trait—one's time perspective—gives rise to subordinate perceptions of trustworthiness. Extension of theory in this regard is important, as trustworthiness and trust in a supervisor have been demonstrated to affect not only employee attitudes, but performance as well. The results of this experiment await correlational or quasi-experimental follow-up investigations that explore the extent to which time perspective structures perceptions of managers in real-world contexts.

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## **Appendix I: Scenarios that exemplify the six different managerial time perspectives**

### *Stem paragraph (common to all scenarios)*

Imagine you have been working in the service industry for the last two years. The company you work for is located in a metropolitan city in India. The organization has been in business for the past 20 years. The team you work with consists of 15 employees, all of whom work for a person that we will call “Manager X.”

### *Past positive manager (second paragraph)*

Manager X is a pleasant person to be around and is nostalgic about the past. More than most, manager X tends to be sentimental and has a high sense of self-esteem. X always leaves people with a feeling of warmth after they come into contact. When it comes to completing work-related tasks, X is good at meeting daily goals and managing employees, but only average when it comes to long-range planning. When it comes to making important decisions, X likes to think carefully about what has happened in the past. This is because X believes we can learn from important workplace decisions that have previously resulted in success.

### *Past negative manager (second paragraph)*

Manager X is a conservative individual who likes to avoid making changes in the work place. In general, X does not like to experience new things. For certain reasons, X has a negative self-image that tends to block any constructive workplace decisions. X has low self-esteem and tends to be anxious. When it comes to completing work-related tasks, X is poor at meeting daily goals, poor at long-range planning, and poor at managing employees. When it comes to making important decisions, X tends to focus heavily on bad decisions made in the past. This leaves X pessimistic about the possibility of making positive changes in the workplace.

### *Present hedonistic manager (second paragraph)*

Manager X is a present-oriented, fun loving individual who tries to have a good time, even at work. X likes to try new and different things in life, and tends to have either high or low spirits. Manager X is good at social networking and is generally satisfied with life. When it comes to completing work-related tasks, X is poor at meeting daily goals and long-range planning, but is good when it comes to managing employees. When it comes to making important decisions, X does not think it is wise to spend too much time thinking about what has happened in the past, instead focusing on how things feel in the present.

### *Present fatalistic manager (second paragraph)*

Manager X is a present-oriented individual who seems to think that important decisions (even workplace decisions) are beyond a person's control. Manager X often believes that "nothing is going right," and always feels a sense of hopelessness when it comes to everyday work-related issues. Manager X is typically low on energy, lacks consistency, and tends to be fatalistic. When it comes to completing work-related tasks, X is poor at meeting daily goals, long-range planning, and managing employees. When it comes to making important day-to-day decisions, X focuses strongly on aspects of the present situation.

### *Future-oriented manager (second paragraph)*

Manager X is a future-oriented individual who tries to ensure that everyone in the work group has targets that need to be accomplished. X is a methodical planner about everything in life and does not take time off to party if there is important work to be finished. Some people think Manager X is a

workaholic who lacks a social life, whereas others see X as a successful goal-oriented individual. When it comes to completing work-related tasks, X is good at meeting daily goals and managing employees, but truly excellent when it comes to long-range planning. When it comes to making important decisions, X does not think it wise to spend too much time thinking about what has happened in the past—instead, X tends to focus on what is the best path for the future.

*Balanced time perspective manager (second paragraph)*

As a boss, Manager X tends to be a very rational individual. Despite this fact, whenever the opportunity for fun exists, X tries to make sure that the moment is enjoyed. But when there is work to be done, nothing else stands in the way. In the workplace X tends to be adaptive, and depending on external circumstances, X tends to have no trouble making optimal decisions. Manager X is in good physical and mental health and has a positive outlook on work life. When it comes to completing work-related tasks, X is good at meeting daily goals, good at long-range planning, and good at managing employees. When it comes to making important decisions, X considers what has been learned from the past and what is known about the present before deciding how to proceed in the future.