

**Supervisor-subordinate relationships and employee performance appraisals: a
multi-source investigation in Croatia**

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Abstract

Purpose – The purpose of this paper is to empirically examine supervisor-subordinate relationships and their impact on performance appraisal in Croatia. Specifically, we were interested in examining how supervisor-subordinate relationships impact subordinate perceptions of performance evaluation and the subordinate's reactions to the performance evaluation.

Design/methodology/approach – This paper uses matched data from a sample of supervisors and subordinates (n =53) in a leading organization in the hospitality industry in Croatia, as well as objective performance appraisal data to examine the impact of supervisor-subordinate relationships on subordinate reactions to performance appraisal.

Findings – The key findings of this study include (1) supervisor trustworthiness determines the quality of their relationship with subordinates and leads to interpersonal liking, and (2) supervisor-subordinate relationship quality has a significant impact on subordinate reactions to performance appraisal process and outcomes.

Research limitations/implications – The overall sample size (n=53) of this study is small, and limits our ability to make generalizations beyond a point. Also, since the sample included only Croatian individuals, the findings maybe an artifact of the fact that they all hold similar values. Future studies should examine these relationships in supervisor-subordinate dyads comprised of individuals of different cultural backgrounds.

Practical implications – Supervisors should attempt to have high quality relationships with most, if not all, subordinates, as this would lead to higher acceptance of the performance appraisal process, which can impact future performance. Also, trustworthiness is closely related to the subordinate's perception of the quality of relationship he/she shares with the supervisor.

Originality/value – This is the first known paper to empirically study performance appraisal processes and relationships in Croatia, which also included both supervisor and subordinate perspectives.

Keywords Croatia, Performance appraisals, Trustworthiness, Supervisor-subordinate relationships

Paper type Research paper

Introduction

In spite of almost regular criticism of the so-called shortcomings in the performance appraisal process and systems, organizations worldwide continue to use performance appraisals (see, e.g., Aguinis, 2009; DeNisi and Murphy, 2017; Varma et al., 2008) for numerous important administrative and developmental decisions (DeNisi and Gonzalez, 2017). However, performance appraisals are not always objective, as a number of intervening variables can significantly impact the outcomes. This is not surprising, given that performance appraisals are ultimately about judgment – one human being evaluating the work of another (Murphy and DeNisi, 2008; Varma and Budhwar, 2020). Indeed, performance appraisals are the prime mechanism through which organizations can measure the progress of any individual employee in his/her job. In addition, the performance appraisal process allows organizations to monitor, evaluate, and reward / punish individual performance. However, for performance appraisals to be successful, several conditions need to be met (see Varma and Budhwar, 2020). For example, the organizational culture must create an environment of trust which allows individual employees to accept their supervisor's evaluation and feedback as fair and well meaning. Failing this, employees will reject the supervisor feedback as biased, which will result in the failure of any desired interventions. Clearly, the reactions of individual employees to the performance appraisal systems are key determinants of the success/failure of such systems (see, e.g., Pichler et al., 2016), as their reactions can impact their relationships with their supervisors.

In this connection, the relationship between supervisors and their subordinates, has been studied through the lens of the leader-member exchange theory (hereinafter, LMX), has received extensive attention in the literature (see, e.g., Colella and Varma,

2001; Graen et al., 2018; Seo et al., 2017), and it has been shown that supervisors tend to be biased in favor of those subordinates with whom they share a good relationship (i.e., high LMX) over those with whom they share a poor relationship (low LMX) (see, e.g., Anand et al., 2018). Clearly, this positive bias in favor of those subordinates who have, or develop, a good relationship with the supervisor is unfair to those subordinates who are not liked by the supervisor or are simply interested in doing their jobs without resorting to developing personal relationships with their supervisors. Indeed, the type of relationship that an individual develops with his/her supervisor has a significant impact on the subordinate's experience with the performance appraisal process (Elicker et al., 2006) and important career outcomes, such as merit raises and promotions (see, e.g., Varma et al., 2009).

The present study was designed to examine the constructs of LMX and interpersonal affect in terms of their impact on subordinate reactions to their performance appraisal, as individual reactions to their performance appraisal can determine future behavior (see, e.g., Dusterhoff et al., 2014). Previous studies have examined the impact of LMX and interpersonal affect on performance appraisal outcomes, but ours is the first study to examine the impact of these constructs on subordinate reactions to performance appraisals. While previous research has primarily emphasized the importance of the supervisor in the performance appraisal process, we believe that studying the reactions of the subordinates is critical, as this can help determine the success of the system, especially since subordinate buy-in can assure higher levels of participation (Cawley et al., 1998).

In designing and conducting our study, we spoke with a few human resource managers of private organizations and discovered that their performance management practices were quite similar to those of private organizations in the United States.

Indeed, many acknowledged adapting their human resource and performance systems from their headquarters and/or partners in the USA. Indeed, most reported developing and using performance appraisal systems and forms derived from USA based organizations, though most reported that they did not train the manager conducting the evaluation. As such, it is important that scholars study these processes and systems in Croatia, as the culture and history of the two nations is very different, and performance management is context-specific.

Our study makes a unique contribution by examining these relationships in Croatia, an important emerging economy in Europe. As the Croatian economy continues to grow, it is important that scholars examine critical human resource processes, such as performance appraisal, so we may guide practitioners to help them develop and implement appropriate professional processes. This is critical for an emerging economy and the earlier that this is done, the higher the chances that these mechanisms will achieve their desired purpose and become part of professional organizations' practices. In addition, we base our study in the hospitality industry, which is a critical component of the emerging Croatian economy and the leading contributor (20%) to their GDP (Obucina, 2019).

Literature review

Croatia and HRM processes

Croatia is an important developing country in Eastern Europe, with a chequered history of recent conflict that has shaped the current reality (see Cigar, 1993 for a discussion of the Serbo-Croatian war). As the country continues to rebuild after the war, the economy is currently dominated by the service industry, specifically

tourism and hotels, as well as agriculture. In this connection, it should be noted that, in an effort to put the memories of the war behind, the Croatian government has chosen to consciously emphasize the natural beauty of the country to promote tourism (Rivera, 2008). Indeed, tourism contributes a significant amount to the national revenue, and while tourism and other industries are still developing, the state controls a significant part of the economy.

One of the results of the political and social transition in countries of central and eastern Europe has been the attempt to introduce market mechanisms in these countries, including Croatia (Goic and Belic, 2008). In the case of Croatia, the hierarchical type of management style (Nukic and Huemann, 2016) seems to be dominant, which creates problems when it comes to addressing the challenges of an emerging economy, since this style does not allow for input from various levels of the organization. Next, one of the outcomes of economic and political change is the need for organizations to retool their HR practices. Clearly, the HR function can play a critical role in the growth and development of emerging economies through its performance management systems (see Varma and Budhwar, 2020).

As Croatia continues to transition from a controlled economy to an important and successful market economy, it is important that we examine the human resource practices and systems (see, e.g., Rivera, 2008; Taylor and Walley, 2002), since globalization of any emerging economy brings its human resource practices into focus, and these become subject to convergence and divergence forces. After decades under a stable, command economy governed by a communist political system, Croatia is attempting to recover from the significant economic turbulence it has experienced over the past twenty years. Indeed, the drastic transformation from a command to market economy has prompted broad changes in individual business management

practices over a seemingly short period of time. For example, the growth of the economy often leads to labor migration from rural to urban areas, putting pressure on governments and business to create jobs and manage infrastructure (see Goic and Belic, 2008 for a discussion).

As global business continues to expand and become more complex, scholars have often talked about creating one global culture (Hamel and Prahalad, 1994)—or, a global approach to human resource management. However, as Hofstede (1984) pointed out over 3 decades ago, certain aspects of human resource management might be culturally specific – indeed, Erutku and Valtee (1997) argue that there is significant variation of personnel and human resource management practices within central and eastern European countries, a distinction that can largely be attributed to the different levels of economic and social development.

Performance management (PMS) in Croatia

It is important to note that the literature on performance management processes (specifically performance appraisal) in Croatia is sparse, even though most organizations in Croatia use some form of performance appraisal and management. In her report on performance appraisal in the EU member states and the European Commission, Staronova (2017) reported that civil service organizations in Croatia used performance appraisal information for the following purposes: (1) promotions, (2) termination, and (3) development. Further, the annual appraisals included the following components: (1) past results, (2) past behavior, (3) job knowledge, (4) competencies, (5) future goals, and (6) monitoring of subordinate and team goals and targets. Interestingly, the primary source of information for individual performance was the supervisor, even though these organizations did not require training for

supervisors, though some of them did penalize supervisors for not conducting performance appraisals on time.

Two critical differences between the civil services and private organizations in Croatia that we found were (1) that the private organizations we spoke with did confirm that they used the results to award raises and promotions, and (2) that the private organizations were concerned with supervisor-subordinate relationships and how those might be impacting the performance appraisal outcomes. In further conversations with the human resources managers and other leaders of these organizations and also the organization where we conducted this study, two types of behaviors that seemingly impacted evaluations were repeatedly mentioned. First, it was noted that supervisors seemed to like some subordinates more than others, and second that some supervisors seemed to favor some of their team members (subordinates) more than others.

Both of these behaviors have been studied in the management literature, albeit not in Croatia, to this point. Accordingly, this study uses both LMX and interpersonal affect as lenses for comparing the impact of the supervisor – subordinate relationship on subordinates' performance appraisal experience and performance evaluation ratings in Croatia. Interpersonal affect is defined as a simple like-dislike reaction of another individual (Zajonc, 1980). We also examine the impact of trustworthiness (Rotter, 1980) on the development of the supervisor-subordinate relationship. Trustworthiness has been defined as “a behavior that increases the return to people who trust you (Glaeser et al., 2000).”

Leader member exchange

Leader member exchange (LMX) theory (see Dienesch and Liden, 1986; Liden et al., 1997) addresses a very important workplace interaction – the relationship

between an individual, and his/her subordinates, with specific reference to the type of relationship that develops between the two individuals. Essentially, LMX theory argues that individuals are prone to creating unique dyads with each of their subordinates, and that these dyads are of differing qualities. In other words, supervisors cast their subordinates into in-groups or out-groups, based on several traits and/or characteristics, such as the subordinate's personal features (e.g., race, gender, national origin, etc.). In other words, an employee's membership of his/her supervisor's in-group or out-group has bearing on the quality of the relationship that has been cultivated between the leader and the member (Dansereau et al., 1975), and influences employee performance (Duchon et al., 1986; Varma et al., 2016).

While we know that membership of in-group versus out-group can impact a subordinate's outcomes, what we do not know is how this might work in Croatia. Given that the Croatian culture is very different from the USA or other major economies such as China and India, it is critical that we understand how local context and culture might impact the development of supervisor-subordinate relationships in Croatia (see also Wang and Varma, 2020).

Interpersonal affect

Research shows that when a supervisor likes a subordinate, he/she is likely to award that subordinate higher ratings than to a subordinate that he/she does not like, for the same level of performance (see, e.g., Varma and Stroh, 2001; Varma et al., 2016). The irony, in both cases, is that it is the organization that loses out, as subordinates who perceive that they share a low LMX relationship with their supervisor(s), or believe that they are not liked (or liked less), are likely to withdraw and do just the bare minimum (Wang and Varma, 2020).

The construct of interpersonal affect is rather interesting as it addresses a basic human emotion – liking. As is well known, human beings tend to like or dislike other human beings, often without a specific reason. In this connection, Zajonc (1980) posited that interpersonal affect, or like-dislike, is a rather involuntary reaction to others that constitutes the core of interpersonal relationships. Lefkowitz (2000) has further argued that when individuals perceive that other individuals share their values, they may be driven to engage with these other individuals much more than with individuals whom they perceive as having less similar values. And, it is this perceived similarity that influences the extent to which individuals develop a fondness, or liking, for each other. In other words, individuals are more likely to be attracted to, and develop a liking for, those they perceive as holding similar values (Antonioni and Park, 2001; Varma et al., 2011; Varma et al., 2016).

Here, some scholars (e.g., Antonioni and Park, 2001; Varma et al., 2011) have argued that perception that two individuals share values is likely to lead to liking for each other, even when they may not share similar backgrounds or origins. Indeed, numerous studies (see, e.g., Butler, 2015; Varma et al., 2016) have shown that when people “like” others, they are prone to want to engage with that target other, even though it may take some time to develop the relationship.

In the past, scholars have reported that when individuals like a person, they prefer to work with this individual and offer assistance to him/her if needed, whereas if an individual is disliked (or liked less compared to others) in the workplace, the individual engages less with others, belongs to fewer groups, performs below expectations and feels less satisfied with his/ her job (see, e.g., Varma et al., 2008).

Trustworthiness

Research shows that people are likely to want to form relationships with those they trust. In other words, individuals are likely to want to interact with, and get to know, people whom they deem trustworthy. Thus, if an individual seems to be trustworthy, others are likely to open up to him/her and share information about themselves. On the other hand, if an individual is seen as not trustworthy, others are likely to stay away from him/her and restrict their interpersonal engagements to the bare minimum. In their experiment of trust in global teams, Jarvenpaa and Leidner (1999) found that trust was related significantly to perceptions of integrity. Similarly, Nicholson et al. (2001) reported that liking played a significant role in determining who individuals trust. In other words, it is clear that we tend to trust people who are similar to us and who we like, and that this trust determines the level of interaction that we are likely to engage in other individuals. In the context of supervisor-subordinate relationship, it is very likely that both individuals would engage more with and develop better quality relationships with those they deem trustworthy while staying away from those that are not seen as such. Of course, supervisors and subordinates may react differentially to trustworthiness cues from each other. In other words, just because two people trust each other does not mean that they trust each other equally. So, if the subordinate trusts the supervisor more than the supervisor trusts him/her, the subordinate is likely to defer to the supervisor, and let him/her “lead” the relationship. Conversely, if the supervisor has a stronger positive reaction to the subordinate and trusts him/her more than the subordinate trusts the supervisor, the supervisor is likely to defer to the subordinate, and let him/her “lead” the relationship. Essentially, this means that the supervisor accepts the superiority of the subordinate in terms of trustworthiness and allows them to be the leading figure in a relationship. Based on the above discussion, we propose:

H1. There is a positive relationship between the trustworthiness and the interpersonal relationships quality in the supervisor – subordinate dyads.

H2. There is a positive relationship between the perceived values similarity and the interpersonal relationship quality in the supervisor – subordinate dyads.

As we noted earlier, it has been argued that while interpersonal affect and LMX are similar emotions, they do operate differently (Pichler et al., 2014). Not surprisingly, research has reported a positive relationship between interpersonal affect and LMX quality (Murphy and Ensher, 1999; Varma and Stroh, 2001; Varma et al., 2009).

H3. There is a positive relationship between the interpersonal affect between the supervisor and subordinate and the LMX quality trend in the supervisor – subordinate dyads.

A high LMX relationship between the supervisor and the subordinate helps the subordinate receive higher performance evaluation scores than those with relatively poor LMX relationship (Pichler et al., 2014), and leads to subordinates being more satisfied with the performance evaluation experience. Thus, we propose:

H4. There is a positive relationship between LMX quality and subordinate's performance evaluation.

H5. There is a positive relationship between LMX quality and subordinate's performance appraisal experience.

Method

Sample

For purposes of this study, we collected data from a leading Croatian company in the hospitality industry. We approached the leadership team and explained our project, and requested access to their employees for our survey, as well as copies of their most recent performance appraisal forms. The General Manager agreed to let us conduct our study in the organization, and sent a note to all the employees explaining our study, and noting that participation was fully voluntary.

We started by sending a note to all the employees ($n = 103$) classified as non-management cadre, explaining the purpose of our study, and inviting them to participate. We attached a short survey which, in addition to demographic questions like age and gender, asked them about their perceptions of (1) their supervisor's personality, (2) the quality of their relationship with their supervisor, (3) their interpersonal affect towards their supervisor, and (4) their perception of values match with their supervisor. In addition, we asked them questions about their reactions to their most recent performance appraisal. A similar survey was sent to individuals classified as management cadre, and who were the direct supervisors of one or more of the individuals discussed above. This survey included questions about the same variables, but from the supervisor's perspective.

Since both versions of the survey were self-reports, we also requested and got copies of the subordinate's most recent appraisal, to compare the survey responses to objective ratings. It should be noted that during this three-stage process, our sample suffered attrition, and we were finally able to get matched supervisor-subordinate responses and subordinate appraisal forms for only 53 subordinates. Accordingly, all analyses are based on the final sample of 53 dyads.

Measures

For this study, we used published, validated, measures, as indicated below. Also, unless indicated otherwise, all variables were measured using a seven-point likert scale ranging from 1 = strongly disagree to 7 = strongly agree. Further, for all scales, the scores were combined and averages were used for all analyses. Barring the performance appraisal measure (described in details below), all other scales were developed originally in English. For use in this study, we created Croatian versions of each of these scales using the dualtranslation method (Brislin, 1980).

Perceived Trustworthiness: The construct of perceived trustworthiness (TRUST) comprised of 4-items drawn from the scale developed by Huang and Murnighan (2010). Sample items include “I believe he/she is trustworthy” and “I believe he/she is very competent”. Specifically, SUBTRUS indicates supervisor’s trustworthiness as perceived by the subordinate ($\alpha = 0.891$) and SUPTRUS indicates subordinate’s trustworthiness as perceived by the supervisor ($\alpha = 0.932$). Considering the high Cronbach alphas these two constructs appear as averages of the items involved. In order to measure which of the two parties in the dyad trusted the other one more, we used the ratio $TRUSTDIV = SUBTRUST / SUPTRUST$. Figures equal to 1 show that both subordinates and supervisors perceive each other as equally trustworthy. Figures greater than 1 indicate that the supervisor is perceived as more trustworthy, while figures smaller than 1 indicate that the subordinate is perceived as more trustworthy.

Perceived Values Similarity: is defined as the degree to which an individual perceives another individual sharing his/her (1) work, (2) personal, (3) family, (4) cultural, and (5) social values (Varma et al., 2011). In the present study, this was measured with the scale (VAL) comprised of 5-items drawn from Varma et al. (2011). Sample items included “I believe we have similar work values.” Specifically,

SUBVAL indicates the subordinate's perception of how similar his/her values are to those of his/her supervisor ($\alpha = 0.908$) and SUPVAL indicates the supervisor's perception of the similarity between his/her values and those of his/her subordinate ($\alpha = 0.941$). As before, these two constructs appear as averages of the scale items. Using the ratio $VALDIV = SUBVAL/SUPVAL$ we measure the strength of the similarity between the supervisor's values and the subordinate's values. Figures equal to one show that both the subordinates and the supervisors perceive the other party's values to be exactly similar to theirs. Figures greater than 1 indicate that the supervisor believes that his/her subordinate's values are similar to his/her values, more than the subordinate believes their similarity, while figures smaller than 1 indicate that the subordinates' perception of values similarity is much higher than the supervisor's.

Interpersonal affect (AFFECT): can be defined as the degree to which an individual likes another individual (Zajonc, 1980) and was measured with a 5-item scale developed by Tsui and Barry (1986), and comprised items such as "I would like to spend more time with him/her" and "I think of this person as a good friend". In our measurement model, SUBAFFECT indicates subordinate's feelings of liking towards his/her supervisor ($\alpha = 0.804$) and SUPAFFECT indicates supervisor's feelings of liking towards the subordinate ($\alpha = 0.862$), and the two constructs appear as averages of the items involved. Using the ratio $AFFECTDIV = SUBAFFECT/SUPAFFECT$ we measure the strength of the supervisor and subordinate's interpersonal affect. As before, figures equal to one show that both subordinates and supervisors feel the same level of liking towards each other. Figures greater than 1 indicate that the supervisor's affect towards the subordinate is higher, while figures smaller than 1 indicate that the subordinate's affect towards the supervisor is higher.

Leader-member exchange: (LMX) was measured with a 7-item scale (Liden et al., 1993). LMX has been defined as the quality of relationship shared by a supervisor and a subordinate in their dyad (see, e.g., Colella and Varma, 2001). Sample items for this scale included “He/she understands my job needs and concerns” and “He/she understands my potential very well”. In our measurement model, SUBLMX indicates subordinate’s perception of the LMX quality that he/she shares with his/her supervisor ($\alpha = 0.862$) and SUPLMX indicates supervisor’s perception of the LMX quality with the subordinate ($\alpha = 0.867$). Using the ratio $LMXDIV = SUBLMX/SUPLMX$ we express the perceived relative quality of the LMX relationship quality between subordinates and supervisors in the dyads. Figures equal to one show that both subordinates and supervisors perceive their relationship quality at the same level. Figures greater than 1 indicate that supervisors perceive their relationship with their subordinate at a higher level than the subordinate perceives it. On the other hand, figures smaller than 1 indicate that the subordinate perceives the relationship with his/her supervisor as being at a higher level than the supervisor does.

Performance evaluation: For performance evaluation (SUBPEVAL) measurement, we used the subordinate’s most recent appraisal form. This form included nine items measuring (1) quality of work, (2) work efficiency, (3) job knowledge, (4) communication skills, (5) initiative (6) responsibility, (7) adaptability, (8) attendance and accuracy, and (9) personal appearance ($\alpha = 0.852$). Subordinates were evaluated by supervisors on a 5-point scale, with 1= not satisfied, 2=below expectations, 3=met expectations, 4=above expectations and 5=excellent. The form was in Croatian, and was translated to English by one of the authors, who is fluent in both languages, and then translated back to Croatian by another co-author, who is also fluent in both languages. Both versions were found to be almost identical.

Performance appraisal experience: The construct of performance appraisal experience (SUBPAEXP) comprised of 6-items adapted from Meyer and Smith (2000). Sample items included ($\alpha = 0.783$): “I feel satisfied with the review” and “I feel good with the way the appraisal was conducted”.

Controls: In order to rule out alternative explanations of the findings (Turnley and Feldman, 2000), we included appropriate control variables in our analyses. Specifically, for both subordinates and supervisors, the following controls were used: Gender (0 = male, 1 = female), education (1 = high school, 2 = Bachelor’s degree, 3 = Master’s degree, 4 = PhD), time of work in current organization (in months) and total work experience (in months), and the time (in months) that subordinates were working under the current supervisor (ORGSUBSUP). Further, we used as controls the ratio of subordinate’s age by supervisor’s age (AGEDIV) to capture any age gap effects, and the ratio of subordinate’s time of work in current organization by supervisor’s time of work in current organization (ORGDIV), to capture any work experience gap effects. Figure 1 presents the operational model (the basic model) of the study indicating the hypotheses to be tested.

INSERT FIGURE 1 ABOUT HERE

Results

Descriptive statistics and correlations

In Table 1, we report the paired sample statistics (means and standard deviations) of the constructs used in the analysis. Using paired sample t-tests, we see that in all cases, the means of the perceptions are higher for the subordinates than the means of the perceptions of supervisors (see Table 1, last column). Table 2 presents the means, the standard deviations and the correlation coefficients of all the constructs in this study. Using the sample t-test for testing the relative quality of the supervisor

and subordinate's perceptions of the various facets of their relationship (e.g., interpersonal affect, LMX, trustworthiness), we find that in all cases, the means of the DIV values are greater than one, confirming the trends found in the results presented in Table 1. Additionally, Table 2 shows that almost all correlations of the study constructs are significant, thus supporting the hypotheses of the study. However, several authors have noted (e.g. Katou et al., 2014) that results based on correlations although interesting, may be misleading due to the interactions between several variables. Accordingly, we employed SEM to further analyze our data.

INSERT TABLE 1 ABOUT HERE

INSERT TABLE 2 ABOUT HERE

SEM estimation

In testing the operational model presented in Figure 1, it should be noted that with respect to the controls, we linked controls with the appropriate constructs. However, for further analyses, we only included the controls that proved to be significant.

We tested three models. First, we tested the basic model considering also that AFFECTDIV partially mediates the relationship between TRUSTDIV and VALDIV, and LMXDIV. The direct links were found to be not significant. Next, we tested the basic model considering also that LMXDIV partially mediates the relationship between AFFECTDIV and SUBPEVAL and SUBPAEXP. These direct links were also found to be not significant. Third, we tested the fully mediating model as it was presented in Figure 1. The results of this model where all (standardized) coefficients are significant are presented in Figure 2. The fit indices (Chi-squared = 25.375, df = 21, p = 0.217, Normed-Chi-squared = 1.225, RMR = 0.026, GFI = 0.898, NFI = 0.909, CFI = 0.981, RMSEA = 0.066) indicated that this fully mediating model fits

the data well. Furthermore, as can be seen in Figure 2, the results of confirmatory factor analysis (CFA) for each construct are presented, where the figures refer to loadings and the figures in parentheses present the percentage of total variance explained (%TVE). Next, in our study, we followed the recommended remedies by Podsakoff et al. (2003) as an ex ante approach for addressing common method bias problems (CMB), and the chi-square test recommended by Brown (2015) as an ex-post approach for examining CMB via Confirmatory Factor Analysis (CFA). In particular, for applying the chi-square test we used the fit indices derived from the hypothesized CFA structure (Chi-squared = 22.258, df = 58, p = 0.004, Normed-Chi-squared = 2.782, RMR = 0.048, GFI = 0.887, NFI = 0.901, CFI = 0.932, RMSEA = 0.187), which was generally acceptable, and the fit indices of a less restrictive CFA structure (Chi-squared = 151.049, df = 12, p = 0.000, Normed-Chi-squared = 12.567, RMR = 0.076, GFI = 0.649, NFI = 0.327, CFI = 0.337, RMSEA = 0.477), which was found to fit much worse. Additionally, comparing the results of these two CFA (i.e. $\Delta\text{chi-square} = 128.791$, $\Delta\text{df} = 4$, $\Delta\text{ratio} = \Delta\text{chi-square}/\Delta\text{df} = 32.197$), we conclude that the factors represent distinct constructs and that common method bias is limited because the $\Delta\text{ratio} = 32.197$ is much larger than the critical value of 3.84 per degree of freedom.

INSERT FIGURE 2 ABOUT HERE

Hypothesis testing

In this section, we summarize the major findings of our study with respect to the hypotheses developed. First, the supervisor's trustworthiness positively influences supervisor interpersonal affect, supporting H1. This finding supports the view that in the supervisor – subordinate dyad relationship, it is the perceived trustworthiness of

the supervisor, as perceived by the subordinate that has a critical impact on their relationship.

Second, the supervisor's perceived values positively influence supervisor interpersonal affect, supporting H2. This finding suggests that it is the values of the supervisor as they are perceived by the subordinate that have the leading role in their relationship. However, comparing the trustworthiness standardized coefficient ($\beta = 0.54$) with the perceived values standardized coefficient ($\beta = 0.39$) we conclude that perceived trustworthiness is stronger than perceived values in determining interpersonal affect.

Third, the supervisor interpersonal affect positively influences supervisor LMX quality, supporting H3. Based on the high value ($\beta = 0.83$) of the standardized coefficient between these two constructs, this finding may support the view that although interpersonal affect and LMX look similar, in fact they operate differently (Pichler et al., 2014). The previous analyses (referring to H1, H2 and H3) used the DIV measure created by us to compare the supervisor and subordinate perceptions on key constructs, for both explanatory and the dependent variables. However, in the following analysis (referring to H4 and H5), the explanatory variables are of the DIV type, but the independent variables are of the actual and not the ratio type – hence, the interpretation of the results is different. In other words, our analyses and results have two distinct parts. The first part refers to the relationship between supervisors and subordinates in terms of trust, values and interpersonal affect. The second part refers to the subordinate's performance evaluation and his/her performance appraisal experience. In essence, in this study we tried to see how the first part (i.e., supervisor-subordinate relationships) influences the second part (i.e., the two distinct measures subordinate's perceptions of performance evaluation and the

subordinate's experience with the performance evaluation). In the first part, we need variables of the DIV type, because they refer to the relationships of two actors (i.e., divisions to express these relationships), whilst in the second part we do not need variables of the DIV type, because we refer only to one actor (i.e., the subordinate). This is also shown in Table 2 where there are no comparisons for the last two lines.

Next, it can be seen that the supervisor LMX quality (ratio type) negatively influences subordinate's performance evaluation (actual type). However, the LMX quality variable is the result of the ratio of subordinate's LMX quality perception (numerator) by the supervisor's LMX quality perception (denominator). In our case, it is the supervisors that conduct the performance evaluation of their subordinates, and the supervisor's opinion about the LMX quality in the LMX quality score that appears at the denominator of the ratio. In other words, in testing H4 we were not interested in explaining the impact of the ratio on subordinate's performance evaluation – rather, we were interested on the impact of the denominator only. This means that the relationship between supervisor's LMX quality and subordinate's performance evaluation is positive. In other words, if supervisor's LMX quality increases (i.e. the inverse is decreasing producing a negative result), then subordinate's performance evaluation by the supervisor is increasing, supporting H4. Adapting the positive standardized coefficient (0.57) of the link according to the LMXDIV quality average value (1.14) reported in Table 2, the actual impact of supervisor's LMX quality on subordinate's performance evaluation is calculated to be equal to 0.50.

Fifth, following the same methodology presented in finding four, we conclude that there is a positive relationship between LMX quality and subordinate's performance appraisal experience, supporting H5. In this case, adapting the positive

standardized coefficient (0.34) of the link according to the LMXDIV quality average value (1.14) reported in Table 2, the actual impact of subordinate's LMX quality on subordinate's performance appraisal experience is calculated to be equal to 0.39. Sixth, in terms of controls, we found that if the time gap of work in the current organization between subordinates and supervisors is increasing, then the performance appraisal experience of subordinates is decreasing ($\beta = -0.19$). In contrast, if the subordinate's tenure under the current supervisor is longer, then the performance evaluation score by the supervisor seems to steadily increase ($\beta = 0.19$). Additionally, if the age of the subordinate increases in comparison with the age of the supervisor (age gap), then the performance appraisal experience of the subordinate is lower ($\beta = -0.22$). Finally, age gap has a positive influence on interpersonal affect ($\beta = 0.11$), indicating that, as they get older, subordinates accept the leading role of supervisors in their relationships.

Discussion and conclusion

Performance appraisal is a key organizational process that helps organizations determine if an employee is able to meet the requirements of his or her job and the degree to which he or she is successful in helping fulfill organizational strategy. This process also allows organizations to evaluate the individual's level of performance on the various dimensions, and then use the outcomes to reward or punish the employee, as appropriate. While it is often assumed and expected that this process will be conducted objectively, the fact remains that very often subjectivity creeps into this process thereby impacting the evaluations and the outcomes. One major process that is known to impact performance appraisal evaluations and outcomes is the quality of the relationship between the supervisor and the subordinate. In cases where the supervisor has a high-quality relationship with the subordinate, research shows that he

or she is likely to award that subordinate higher ratings for the same level of performance as another subordinate with whom he might share a lower-quality relationship.

As such, it is clearly important that scholars study the role that supervisor-subordinate relationships play in appraisal outcomes since appraisal outcomes are the mechanism through which an organization informs a subordinate how his or her performance is viewed. Depending on how the subordinate views the outcomes, his or her reactions could have a significant impact on his or her subsequent performance as well as the organization strategy. In cases where the subordinate believes that the evaluation is fair, he or she is likely to continue to work hard or work even harder thereby helping the organization achieve its strategy. In cases where the subordinate believes that his/her evaluation is unfair, he or she might reduce performance levels or even exit the organization thereby impacting the organization's ability to meet its strategic goals. Next, given that supervisor-subordinate relationships are significantly impacted by local context and culture, it is important that these relationships are examined in each country on their own merits, rather than assume that the findings of one country will automatically generalize to another.

Key findings

This study was designed to examine the impact of supervisor-subordinate relationships on performance appraisals and performance appraisal reactions, in Croatia. Our results lead to several interesting findings – first, in the supervisor – subordinate dyad relationship, the subordinate's perception of the supervisor's trustworthiness plays a critical role in determining the quality of their relationship.

Next, supervisor interpersonal affect positively influences the quality of the relationship that the supervisor develops with his/her subordinate (LMX), as argued

by previous scholars (see, e.g., Colella and Varma, 2001). This is an important finding that also offers critical theoretical and practical implications that we discuss below. In addition, we found that as the quality of the supervisor's relationship with his/her subordinate increases (LMX), the corresponding performance evaluation score also increases. This is an important finding and worthy of future investigations.

Practical implications

As we noted above, we found a positive relationship between LMX quality and subordinate's performance appraisal experience. This finding offers a clear practical implication for organizations. In other words, when a subordinate believes he/she has a good relationship with his/her supervisor, he/she is more likely to feel satisfied with his/her performance appraisal – both the process and the outcome. As such, supervisors should attempt to have high quality relationships with most, if not all, subordinates, as this would lead to more positive subordinate reactions to the performance appraisal process, which can impact future performance.

Next, the finding that trustworthiness is closely related to the subordinate's perception of the quality of relationship he/she shares with the supervisor, offers a clear directive to organizations. In other words, it is important that supervisors understand that their actions and words are being closely watched by their subordinates, and that any deviation between words and actions can result in lowered levels of trust and lower quality relationship between the two parties.

Finally, it is critical that organizations make both supervisors and subordinates aware of the organization's human resource philosophy and train them both in the performance appraisal processes. This will help increase buy-in from both sides, as well as increase the chances of higher objectivity and accuracy in the ratings.

Theoretical implications

Our findings also offer some important theoretical implications. First, we find that perceived trustworthiness is a strong determinant of interpersonal affect. Next, we also find that perceived values match is also a determinant of interpersonal affect, though not as strong as perceived trustworthiness. These findings can help scholars better understand the determinants and development of interpersonal affect.

Also, even though we did not set out to test the relationship between interpersonal affect and LMX, our results do confirm that these are independent constructs, thus also contributing to relevant theory. In addition, our findings offer insight into the direction of the affect-LMX relationship, by suggesting that interpersonal affect impacts LMX quality, rather than the other way around.

Limitations and suggestions for future research

While our study does present some interesting findings with reference to the impact of supervisor-subordinate relationships and interpersonal affect on performance appraisal ratings, it is important to acknowledge the limitations of our study, and offer suggestions for future research. First, our overall sample size (n 5 53) is small, and thus limits our ability to make generalizations beyond a point. However, it should be noted that we collected data from both the subordinate and his/her supervisor, and then matched those data with the subordinate's objective appraisal. As such, our design does offer allow us to have confidence in our findings, though we do hope that future studies will examine our model with larger samples.

Of course, it is very possible that since our complete sample included only Croatian individuals, they hold similar values, and as such, our findings are an artifact of this fact. It would be interesting for future studies to examine these relationships in supervisor subordinate dyads comprised of individuals of different cultural backgrounds.

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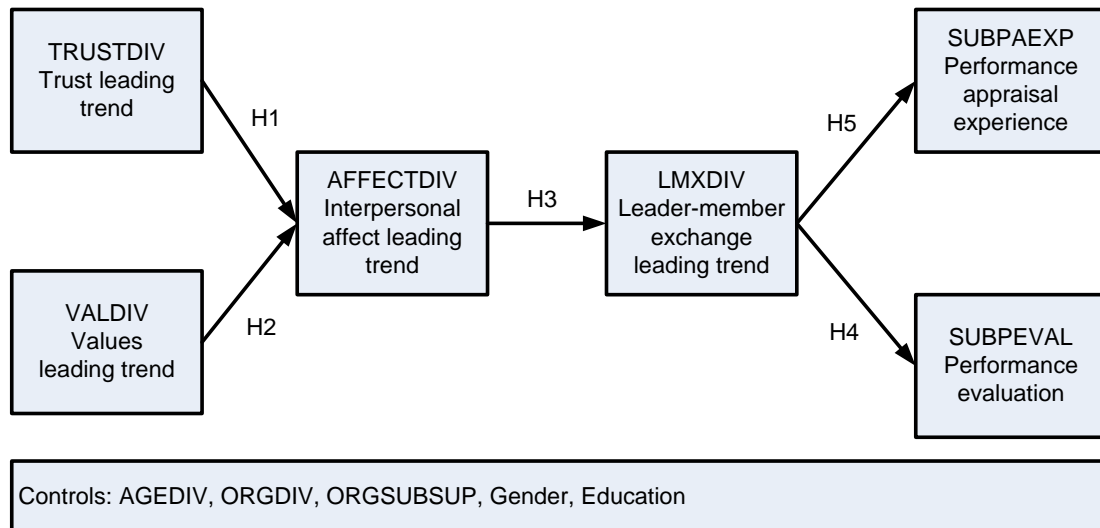


Figure 1: The study operational model

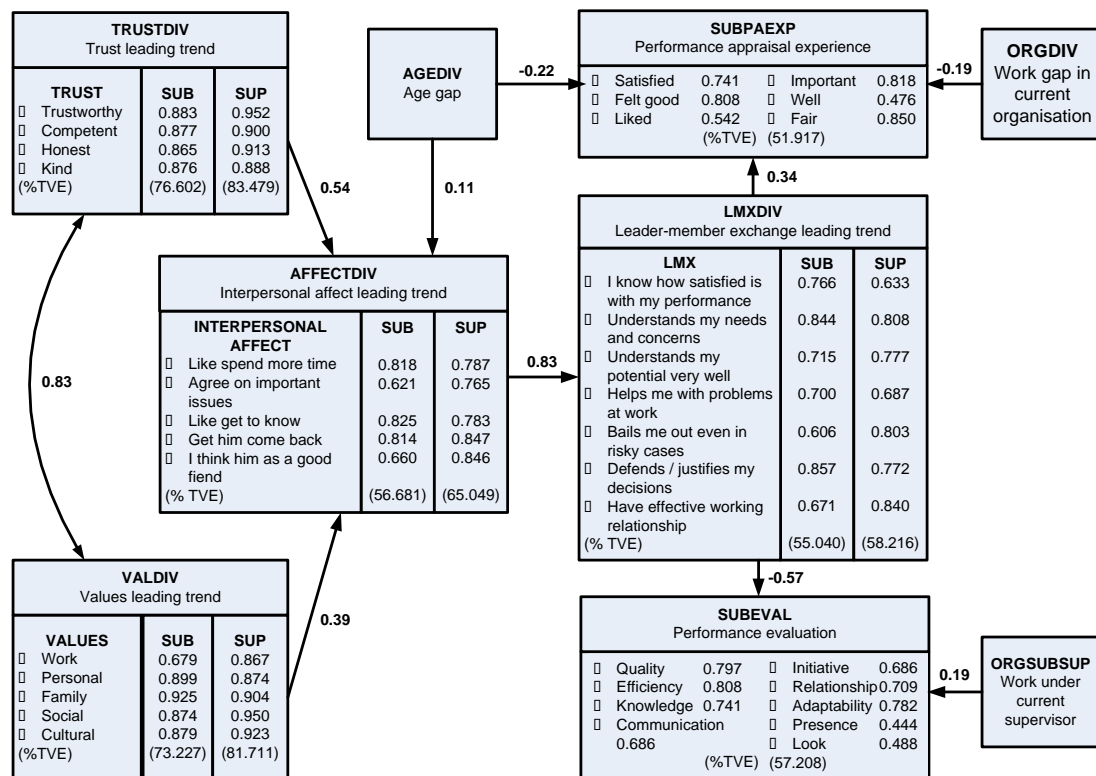


Figure 2: Results from the fully mediation model

Table 1: Paired sample statistics of supervisor and subordinate perceptions

		Mean (Standard deviation)	Significances of paired sample t tests	Factors
Pair 1	SUBTRUST	6.37 (0.59)	0.000	Leading trend
	SUPTRUST	5.51 (0.95)		Following trend
Pair 2	SUBVAL	5.87 (0.88)	0.000	Leading trend
	SUPVAL	5.06 (0.96)		Following trend
Pair 3	SUBAFFECT	6.13 (0.66)	0.000	Leading trend
	SUPAFFECT	5.28 (0.87)		Following trend
Pair 4	SUBLMX	6.24 (0.53)	0.000	Leading trend
	SUPLMX	5.22 (0.80)		Following trend

Table 2: Means, standard deviations and correlation coefficients between constructs

	Mean (standard deviation)	Significances of one-sample t test for testing value = 1 of the DIV variables	Correlation coefficients				
			Personality (DIV)	Values (DIV)	Interpersonal affect (DIV)	LMX (DIV)	Performance appraisal reaction
Trustworthiness (DIV)	1.22 (0.45)	0.001	1				
Perceived Values Similarity (DIV)	1.23 (0.43)	0.000	0.830**	1			
Interpersonal affect (DIV)	1.22 (0.47)	0.001	0.835**	0.871**	1		
LMX (DIV)	1.14 (0.24)	0.000	0.754**	0.640**	0.488**	1	
Performance appraisal reaction	5.96 (0.65)		0.350*	0.349*	0.284*	0.286*	1
Subordinate performance	3.60 (0.41)		-0.484**	-0.476**	-0.412**	-0.340*	-0.072

** p < 0.01

* p < 0.05