Innovativeness in Organizations: The Role of LMX and Organizational Justice. The Case of Poland

Agnieszka Wojtczuk-Turek
Department of Human Capital Development
Warsaw School of Economics
awojtc@sgh.waw.pl

Dariusz Turek
Institute of Enterprise
Warsaw School of Economics
dturek@sgh.waw.pl

Abstract
The subject of the paper is the analysis of chosen determinants of innovative behaviors in the workplace (IWB). Particular focus was placed on the examination of relations between IWB and leader-member exchange (LMX), and organizational justice. Theoretical premises and empirical studies to date suggest that both LMX and organizational justice positively correlate with IWB. The examination of the variables with regard to IWB was conducted in isolation, however, which indicates that it does not verify how LMX and organizational justice jointly explain IWB. In order to analyze the problem, a survey was conducted on 201 employees of Polish firms. The analyses confirmed a positive correlation between IWB and LMX (r = 0.38; p < 0.01), and between IWB and organizational justice (r = 0.36; p < 0.01). The obtained results confirmed the postulated research hypotheses. However, regression analyzes indicated that both independent variables introduced into the model, despite their significant mutual interrelation, do not cause an increase in the explanation of variance of the results for IWB. It was explained by suggesting that the chosen set of variables, in which one variable functions as a mediator, does not explain IWB linearly, but structurally.

Keywords – innovative workplace behaviour (IWB), leader-member exchange (LMX), organizational justice.

Introduction
It is an assumption commonly accepted by both the theoreticians and the practitioners that individual innovation helps to attain organizational success (Van de Ven, 1986;
This assumption is important because employee innovative behavior is related to the key aspects of organizational effectiveness: generation, promotion and realization of new ideas which benefit performance (Sanders et al., 2010).

Although the literature indicates a significant number of various determinants of innovative behavior, one of the key factors is leadership (Mumford & Licuanan, 2004; de Jong & Den Hartog, 2007; Rank et al., 2009). The managers influence the professional activity of employees in numerous ways. Supervisors realize many tasks among others like: motivating and inspiring employees, and also stimulating their development. It is a significant aspect of their function to optimally use the potential of the subordinates and, especially, their creative competences (Janssen, 2005). By way of a unique management style, the leaders stimulate a specific type of employee activity, including the activity of the innovative character. In this context, it is mentioned that exchange and quality of the relations between the leader and the subordinate is an important element causing the employees to perform creative acts (Lio et al., 2010; Agarwal et al., 2012; Muñoz-Doyague & Nieto, 2012), but no less important is the feeling that within an organization, the process of redistribution of resources, privileges and remuneration takes place in a just manner (Ramamoorthy et al., 2005; Young, 2012). An argument which weighs in favor of presenting these two particular dimensions of those relations can be found in the empirical research results, indicating a mutual relationship between these theoretical constructs (Scandura, 1999; Masterson et al., 2000; Erdogan, Liden & Kraimer, 2006).

The aim of this article is to investigate the relationship between organizational justice, leader-member exchange (LMX) and innovative workplace behavior. Poslušajte

2. Theory and Hypothesis Development

2.1 Innovative work behavior

Innovative work behavior (IWB) (West & Farr, 1989; Scott & Bruce, 1994; Kleysen & Street, 2001; Yuan & Woodman, 2010) is a construct related to employee’s individual characteristics within specifically undertaken forms of activity. It is defined as the sum of the individual’s intentional actions which are aimed at generation, promotion and realization of new ideas within a work role, group or organization, in order to benefit role performance, the group or the organization (Janssen, 2000), at any level of organization (West & Farr, 1989).

Some authors often describe the innovation process as being composed of two main phases: initiation and implementation (Jong & Den Hartog, 2007). The distinction between the two phases is believed to be the point at which the idea is first adopted; i.e., the point at which the decision to implement the innovation is made. The first stage ends with the production of an idea, while the second stage ends as soon as the idea is implemented (King & Anderson, 2002).

To initiate the process of innovation, an individual begins with the existence of problems that need to be solved (Scott & Bruce, 1994). Thus, the presence of problems becomes the basis of employee creation of new ideas (Janssen, 2004). After creating new ideas, an individual should market the new ideas in order to garner support for their
Innovativeness in Organizations: The Role of LMX and Organizational Justice. The Case of Poland

implementation as real products, services, methods, or techniques (Kanter, 1988). The decision to implement a specific solution is based on some defined, very rational criteria that take into account the current and future situation of the organization (in case of the innovation project being a large scale enterprise). It reflects one of the perspectives of the innovation phenomenon, namely the efficiency-oriented perspective (Yuan & Woodman, 2010).

The analyses of various types of activities of creative nature conducted by Kleysen and Street (2001) allowed to isolate 17 types of behaviors which comprise five general dimensions of innovative behavior. They include: opportunity exploration, generativity, formative investigation, championing and application.

The above characteristics allows us to state that the competences necessary to undertake and efficiently realize innovative behavior exceed those which are usually associated with individual innovativeness, e.g.: creativity, since the key characteristic of such behaviors is the realization of ideas (which does not have to be present in the case of creative behaviors). Nevertheless, the fact remains that implementation of ideas has a creative character as well, since the process is often related to a need to solve all kinds of problems of organizational, technological, social, etc., nature. From this point of view, it seems justified to search for innovative behavior predictors within a wide range of organizational (and also situational) variables, and to determine the conditions under which they can be undertaken and successfully implemented. Especially worth noticing here are the relations of LMX, as well as fairness in managers’ conduct because these variables correlate positively with several desirable outcomes, such as: subordinate performance, job satisfaction, and organizational commitment (Gerstner & Day, 1997; Cohen-Charash & Spector, 2001; Colquitt et al., 2001), including, naturally, also the innovative work behavior (Janssen, 2004; Lio et al., 2010; Agarwal et al., 2012; Muñoz-Doyague & Nieto, 2012; Linn, 2012).

The leader-member exchange (LMX) and IWB

The concept of LMX is most often understood as the quality of the relations between the managers and the subordinates (Dienesch & Liden, 1986). These relations may be analyzed on at least two levels. The first one – describing the exchange of the basic needs and resources of primarily economic character (the formal contract); and the second one – describing extra-economic needs of the employee, including: trust, special treatment, rewards, etc. (the informal contract) (Wayne, Shore & Liden, 1997). Such a distinction results from the fact that the managers enter diverse relations with their employees and do not treat all of them with equal respect. Due to competences some employees possess, or due to their other unique character traits or talents, leaders enter into closer relations of exchange with them (high quality exchange) (Deluga & Perry, 1997; Henderson et al., 2009). Such an exchange, also described as intergroup relationship, comprises the relations which go beyond the formal job contract, and are manifested via special treatment of the employee, who is granted non-standard, extra support, with higher frequency of interactions, higher amount of trust and larger range of responsibilities (Dienesch & Liden, 1986). Such exchange has, obviously, a mutual character. The superior receives a job well done, and the subordinate, thanks to his
own involvement, can count on higher financial benefits, access to relevant information, or a more accessible career development and promotion path. Moreover, shortening the distance between the leader and the subordinate results in the leader’s increased awareness of the needs, expectations and problems of a given employee in his or her job, which might undoubtedly contribute to the employee’s more innovative and productive work performance (Muñoz-Doyague & Nieto, 2012). The employee, due to such high quality exchange, gains access to direct feedback related to the generated creative ideas or a possibility to better mobilize the resources and to receive increased support during the phase of implementing the solutions.

Research results suggest that when the leaders are perceived as helpful in the realization of innovative activities, the subordinates feel encouraged to use their influence while implementing innovative activities in the workplace (Janssen, 2005). Noticing the leader’s support, the employee increases his efficiency, especially when his self-esteem with regard to his position in the organization is low (Rank et al., 2009). Low self-esteem causes the employee to doubt whether his efforts at introducing new ideas are appreciated by the organization, especially in the case when they meet with some resistance. Thus, such employees may particularly benefit from the existence of high quality exchange with the leader who instills optimism in them and inspires their confidence.

The support granted by the leader manifests itself through the following types of behaviors:
- monitoring the subordinates’ work and providing feedback at the right time;
- giving the employees a sense of emotional support;
- expressing recognition in both public and private circumstances;
- consulting professional issues with them (Amabile et al., 2004).

To sum up, it is necessary to state that the leader’s behaviors serving to support innovative behavior are varied and adapted to particular forms of activity. They do not serve to stimulate creativity only, as it forms just an initial phase of innovativeness. The important aspect at the stage of implementing ideas is the real help on the part of the superior.

Nevertheless, the empirical research into the relation between LMX and innovation is still at its early stages (Muñoz-Doyague & Nieto, 2012, p. 129), although it has provided support for a possible relation between LMX and innovative behavior (Scott & Bruce, 1994; Lio et al., 2010; Sanders et al., 2010; Slåtten, 2011; Agarwal et al., 2012; Muñoz-Doyague & Nieto, 2012).

Accordingly, in order to add new evidence to the current empirical literature and basing on the above arguments, we propose to test the following hypothesis:

H1. A high-quality LMX relationship is positively related to innovative work behavior.

Organizational justice and IWB
Lack of high quality exchange between leaders and members may cause the latter to feel unjustly treated, as the leaders communicate with them less frequently and grant them less trust (Cropanzano & Mitchell, 2005). The term “justice” is defined here as a general sense
Innovativeness in Organizations: The Role of LMX and Organizational Justice. The Case of Poland

In an individual has of what in his or her opinion is fair at a workplace (Colquitt, Greenberg & Zapata-Phelan, 2005). Understood in such a manner, the notion of justice is most often expressed within four dimensions which, de facto, reflect individual motives and needs of the employees with regard to ensuring justice in the workplace. Namely, the employees are concerned with fair division and distribution of resources in the organization, e.g., remuneration, bonuses, promotions – which is described as distributive justice. Individuals are also concerned with all decisions being based on fair criteria, which allows them to understand the way in which these resources are divided – which is described as procedural justice. The employees also need to be informed about the decisions which might concern them personally – which is described as informational justice. Lastly, every employee has a need to be treated with due respect, especially by those who are responsible for management and organizational supervision – which is described as interactive justice (Colquitt, Greenberg & Zapata-Phelan, 2005, p. 5).

The research on the perceive justice in work environment which has been conducted worldwide for over 30 years now, shows that such an evaluation, made by the employees, translates into many varied organizational behaviors, and particularly into: job satisfaction, engagement, productivity, citizenship behaviors, trust, cooperation, turnover (Cohen-Charash & Spector, 2001; Colquitt et al., 2001).

Organizational justice is then an important theoretical construct, explaining a number of organizational behaviors. Therefore, a question arises whether – and how – justice conditions explain innovative behavior as well. It appears that the answer to this question depends on the type of justice which is under discussion. The separate dimensions of justice are mutually independent (Bies, 2005) and they explain creative behaviors in the organization in different ways (Simmons, 2011).

Starting with Homas’ analyses (1961), it is stated that individuals gain a sense of justice when their efforts, and the efforts of the others, are proportionate to the obtained results: the higher an individual’s input is, the bigger result is expected. Comparisons with the others will lead to appearance of a relative deprivation, in a situation of a negative evaluation of the benefits of exchange, or to a sense of relative advantage, when one achieves more than expected (Homas, 1961).

Homas’ analyses also came to inspire the creation of Adams’ equity theory of motivation. According to Adams, an individual measures her job-related input (resources, competences, energy, etc.) against the inputs of other people employed in similar positions, and then compares them with the outcomes received. If she perceives the ratio as equivalent to the ratios of the others, she assumes that a state of equity takes place. Should these ratios be unequal, a sense of injustice appears, which means that an individual believes that she receives inadequate or excessive rewards for her work. This leads to specific behavioral consequences which can result in an increased or decreased efficiency, better or worse performance, absenteeism or voluntary resignation from a job (Adams, 1965).

When inequity is observed, employees are motivated to maintain or restore equity; furthermore, perceived inequity harms employees’ motivation to produce creative work as attention is diverted to address perceived inequities, which may inhibit innovativeness because of its strong reliance on internal motivations (Amabile, 1988).

Janssen (2000) showed that employees behaved more innovatively as a response to higher job demand when they perceived that a reward-effort ratio was fair. In his next
study he found that IWB could produce stress when distributive and procedural fairness were low. He further explained that procedural fairness could buffer the stress caused by innovative employees in the context of low distributive justice (Janssen 2004). Shih and Susanto (2011) claim that innovative employees who perceive distributive fairness may be happy because they perceive that the organization has fulfilled the desired outcomes. Such perceptions may also constitute a signal for innovative employees that the organization will give similar rewards in the future.

Although the sense of distributive justice is an important dimension of employees’ functioning, research shows that employees are more concerned with fair allocation procedures than with fair allocation itself (Colquitt, Greenberg & Zapata-Phelan, 2005). Empirical studies also show that, for the employees, procedural justice is more important in a situation when it is impossible to employ distributive justice, or when distributive justice is absent, as it enables to explain why such procedures, and not any other, are indispensable (Shaw, Wild & Colquitt, 2003).

Two aspects are important in an analysis of organizational procedural justice, namely: the process of decision control, mentioned above, and the process of decision explanation. While the first one concerns the employee’s knowledge about the circumstances of making decisions by managers and their possible participation in it (voice effect), the second aspect denotes the knowledge about the reasons behind these decisions. It seems that the process of control is viewed by the employees as particularly important. The authors showed that the employees, given an opportunity to take a stance on the decisions made, demonstrate a higher sense of fairness than those who receive the decisions without a possibility to take such a stance. Thus, it is described as fair process effect (van den Bos, 2005, p. 275).

As mentioned, procedural justice is also linked with voice; this is related to employees feeling that their point of view is being heard (Thibaut & Walker, 1975). If organizations are supportive and promote voice with regard to policies and procedures, they are more likely to observe increased creative performance (Amabile & Gryskiewicz, 1989). Employers could afford support for creative work by providing employees with an opportunity to submit ideas and novel thoughts to a suggestion box (Oldham & Cummings, 1996).

Moreover, if the procedural justice exists in an organization, the staff will take part in the decisions, and the organization will support them. Eventually, the commitment and risk-taking will increase on the part of the staff, and their desire for innovativeness will rise (Rutherford & Holt, 2007, p. 431).

Referring back to the studies of Bies and Moag from the mid 1980s, the literature points out that both the distribution of resources and the quality of procedures are definitely insufficient for the employees to perceive and evaluate the organization as fair. A significant role is also played by the way in which the managers perform the allocation of resources and implementation of rules, and, in particular, by the relations (communicative, interpersonal) between the superiors and the subordinates during these activities (Bies, 2002). Improper behavior of the managers and improper ways of constructing relations with collaborators, despite an adequate allocation of resources (e.g., bonuses, etc.), and fair procedures, may influence a subjective sense of injustice. Individuals who are overlooked in decisive and informational processes, are
treated instrumentally. They neither trust their supervisors, nor show commitment and innovativeness in their work and, moreover, they demonstrate readiness for aggressive behaviors and unlawful acts. Perceived positive feedback and support are particularly important for employees with job requirements that include the production of creative work because it influences their motivation (Simmons, 2011, p. 11). It is especially important in the second stage of innovative behaviors – implementation of ideas. A sense of support and adequate feedback allow the employees to perceive that their activities are accepted by the managerial staff.

The analyses demonstrated above allow for the formulation of the following hypothesis:

**H2. General perception of organizational justice is positively related to innovative work behavior.**

### 3. Method

#### 3.1 Sample

The surveys covered 201 employees of firms diversified as to size and line of business. The majority of employees who participated in the survey represented corporations (30%) and medium companies (26%), from the sector of: financial agency services and banking, public administration (11%) IT and telecommunication, education and consulting (10%), and others (18%). Among the respondents, the majority were employees within age range of 26-35 (66%), with university education (97%), holding non-managerial positions (63%), mostly with the work experience of over 5 years (53%); among the respondents 63% were female, 34% male. The survey was anonymous; the questionnaire was sent to the respondents via electronic mail. 855 questionnaires were distributed, and 201 of them were answered and returned.

#### 3.2 Measures

*Innovative workplace behavior.* The variable was measured with the 14 item Innovative Behavior Questionnaire developed by Kleysen and Street (2001). The data was provided by choosing an answer to every statement from a 6-point scale, where: 1 – „never”; 6 – „always”. In the process of cultural adaptation of the instrument, statistic analyses were performed for the sake of secondary verification of the reliability. Coefficient of reliability α for the whole instrument amounted to 0.93. On the basis of the factor analysis (KMO = 0.935; χ² = 2156.868; p < 0.001) performed by the method of Principal Component Analysis with Varimax Rotation (using Kaiser Normalization), two factors were isolated: recognizing problems and initiating activities (factor 2, α = 0.89), and generating ideas and implementing them (factor 1, α = 0.88). Jointly, they account for 67% of variances.

*Leader-Member Exchange (LMX).* The variable was measured with the 12 item scale developed by Liden and Maslyn (1998). Coefficient of reliability α for the whole instrument amounted to 0.92. The data was provided by choosing an answer
on a Likert type 5-point scale, where: 1 indicates „strongly disagree”; 5 indicates „strongly agree”.

Organizational justice. This variable was measured through the 20 item questionnaire developed by Niehoff and Moorman (1993). The coefficient of reliability α for the instrument amounted to a = 0.94. The data was provided by choosing an answer on a Likert type 5-point scale, where: 1 indicates „strongly disagree” and 5 indicates „strongly agree”.

Controlled variables: sex (1 = female; 2 = male), age (1 = below 25; 2 = 26-35; 3 = 36-45; 4 = 46-55; 5 over 55), education (1 = university; 2 = other), job position (1 = managerial; 2 = non-managerial), work experience (1 = below 1 year; 2 = 1-5; 3 = over 5 years), company size (1 = micro; 2 = small; 3 = medium; 4 = large; 5 = corporation), sectors (construction = 1; industrial production = 2; financial agency, banks, insurance brokerage = 3; medicine, pharmaceutics = 4; IT and telecommunication = 5; retail and wholesale = 6; food = 7; education, consulting = 8; public administration = 9; marketing = 10; publishing = 11; public other = 12).

4. Results
In order to verify the hypothesizes about the relations between LMX, organizational justice and innovative work behavior, the analysis was conducted of the correlations for individual variables. The results of inter-correlation, together with the descriptive statistics (mean and standard deviations) are presented in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>IWB: Recognizing</td>
<td>3.85</td>
<td>1.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>problems and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>initiating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IWB: Generating</td>
<td>3.73</td>
<td>0.93</td>
<td>.80**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ideas and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implementing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMX</td>
<td>3.25</td>
<td>0.81</td>
<td>.38**</td>
<td>.38**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>3.31</td>
<td>0.80</td>
<td>.35**</td>
<td>.36**</td>
<td>.60**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.02</td>
<td>0.16</td>
<td>-.05</td>
<td>-.02</td>
<td>-.03</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job position</td>
<td>1.63</td>
<td>0.48</td>
<td>-.32**</td>
<td>-.35**</td>
<td>-.09</td>
<td>-.16*</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td>2.45</td>
<td>0.64</td>
<td>.21**</td>
<td>.26**</td>
<td>-.07</td>
<td>.02</td>
<td>-.08</td>
<td>-.44**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>1.36</td>
<td>0.48</td>
<td>.15*</td>
<td>.08</td>
<td>.03</td>
<td>.08</td>
<td>-.05</td>
<td>-.23**</td>
<td>.15*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>2.08</td>
<td>0.65</td>
<td>.22**</td>
<td>.15*</td>
<td>-.03</td>
<td>.05</td>
<td>-.18*</td>
<td>-.28**</td>
<td>.44**</td>
<td>.09</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>3.44</td>
<td>1.32</td>
<td>.04</td>
<td>.04</td>
<td>-.06</td>
<td>.07</td>
<td>-.13</td>
<td>.01</td>
<td>.13</td>
<td>.08</td>
<td>.07</td>
<td>1</td>
</tr>
<tr>
<td>Sector</td>
<td>6.72</td>
<td>3.53</td>
<td>.01</td>
<td>-.06</td>
<td>-.03</td>
<td>-.13</td>
<td>.03</td>
<td>.09</td>
<td>-.09</td>
<td>-.08</td>
<td>-.17*</td>
<td>-.10</td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistics and intercorrelations

N=201; * p<0.05 (two-tailed test), ** p<0.01 (two-tailed test)
Source: Own study.
The obtained results indicate that two dimensions of the dependant variable (recognizing problems and initiating activities; generating ideas and implementing them) significantly and positively correlate with the independent variables (LMX and organizational justice). In the case of the first dimension (i.e.: recognizing problems and initiating activities) positive correlation was observed with LMX ($r = 0.379$, $p < 0.01$) and with aggregated sense of organizational justice ($r = 0.353$, $p < 0.01$). Almost analogical results were achieved as regards the second dimension IWB (i.e.: generating ideas and implementing them). It positively correlates with both LMX ($r = 0.381$, $p < 0.01$), and organizational justice ($r = 0.360$, $p < 0.01$). As presented in Table 1., the independent variables are also closely interconnected ($r = 0.605$, $p < 0.01$), which was suggested by the earlier research on the subject (Scandura, 1999; Masterson et al., 2000; Erdogan, Liden & Kraimer, 2006).

Although there are significant relationships between the variables, they do not allow for drawing conclusions about the reasons of the sense of justice. In order to identify organizational predictors of this variable, two models of linear regression (one for each dimension of IWB) have been constructed (Table 2).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Recognizing problems and initiating activities</th>
<th>Generating ideas and implementing them</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Step 1: Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>.027</td>
<td>.034</td>
</tr>
<tr>
<td>Sector</td>
<td>.076</td>
<td>.081</td>
</tr>
<tr>
<td>Education</td>
<td>-.012</td>
<td>-.002</td>
</tr>
<tr>
<td>Job position</td>
<td>-.270</td>
<td>-.214</td>
</tr>
<tr>
<td>Work experience</td>
<td>.040</td>
<td>.089</td>
</tr>
<tr>
<td>Sex</td>
<td>.068</td>
<td>.063</td>
</tr>
<tr>
<td>Age</td>
<td>.119</td>
<td>.133</td>
</tr>
</tbody>
</table>

Adj. $R^2 = 0.11$; $F=4.449$***  
Adj. $R^2 = 0.11$; $F=4.453$**

Step 2: LMX

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.343</td>
<td>.251</td>
<td>.352</td>
</tr>
</tbody>
</table>

Adj. $R^2 = 0.22$; $F=8.137$***

Step 3: Organizational justice

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.151</td>
<td>.156</td>
</tr>
</tbody>
</table>

Adj. $R^2 = 0.23$; $F=7.703$***  
Adj. $R^2 = 0.24$; $F=7.978$**

N=201; *** $p<0.001$
Source: Own study.

Table 2:
Hierarchical regression analysis on innovative work behavior

Two models of regression were constructed for two dimensions of innovative behavior. The first one for “recognizing problems and initiating activities”, accounting for all the variables, explains 23% of the variance of the results, the second one, for “generating ideas and implementing them”, explains 24% of the variance of the results.
In the first model, the main predictors (step 3) are: LMX ($\beta = 0.251, p < 0.01$) and job position ($\beta = -0.201, p < 0.01$). Here, organizational justice turned out to be a weak predictor of the first dimension of IWB (lack of statistical significance). Comparing step 2 and step 3, it is possible to notice that inclusion of this variable into the model not only does not increase the explanation of the variance of the results, but also lowers the adjustment of the model and its accuracy.

In the case of the second model of regression, the situation is analogical. Here also LMX ($\beta = 0.256, p < 0.01$) turned out to be the strongest predictor of IWB. Again, organizational justice did not exceed the level of significance and here it also lowers the accuracy and adjustment of the model.

It appears from the above that although LMX and organizational justice strongly correlate with each other ($r = 0.605, p < 0.01$), this interaction does not translate into a straightforward explanation of IWB. It is because both LMX, and organizational justice are better predictors of IWB when they are analyzed in isolation from one another.

To sum up, the result obtained can be applied to the postulated research hypotheses. In the case of the first hypothesis (H1), which assumes positive relation between LMX and IWB, empirical support was obtained, because LMX correlates with IWM in a statistically significant way. This hypothesis is, thus, confirmed.

In the case of the second hypothesis (H2), which assumes positive relation between organizational justice and IWB, confirmation was also achieved. In the course of the analyzes it turned out that these variables are significantly interrelated. Thus, this hypothesis also obtained empirical support and allows to be confirmed.

5. Discussion and Limitations

This study investigates the relationship between leader-member exchange, organizational justice and innovative work behavior. We hypothesized that IWB is positively associated with both LMX and organizational justice. The results of the analysis of 201 employees working in Polish firms confirm these hypotheses. IWB has a significant and positive relationship with both LMX and organizational justice. It is worthwhile, then, in the context of obtained results, to comment on the findings to date in the field of research into innovative work behavior.

The relationship between LMX and IWB was the subject of numerous previous studies (Scott & Bruce, 1994; Lio et al., 2010; Sanders et al., 2010; Slåtten, 2011; Agarwal et al., 2012; Muñoz-Doyague & Nieto, 2012), as it was assumed that creative activities manifested by the employees must be in some manner related to their relations with their superiors. Leaders may support or reject the creative ideas of their subordinates, they can display emotional support and kindliness, or coldness and indifference, which together translates into employees’ motivation and readiness to manifest innovativeness in a workplace. As concluded by Jong and Hartog (2007, p. 58), creating a positive and safe atmosphere by a leader encourages openness, and risk taking is important to idea generation and application. However, the results of the earlier research indicate that the variables are interrelated, although not in a direct manner. For example, Agarwal and colleagues (2012, p. 221) claim that LMX does not influence innovative work behavior
Innovativeness in Organizations: The Role of LMX and Organizational Justice. The Case of Poland

directly; it impacts this variable indirectly through increased work engagement. Similarly, Liao and colleagues (2010) have demonstrated that LMX has an indirect and positive relationship with creativity via self-efficacy. Also Sanders and colleagues (2010, p. 65), presenting their findings, stress that the relation between LMX and IWB requires the presence of a mediator which, in their case, was HR practices.

The results presented in this article seem to confirm the observations of the authors mentioned above. Although LMX correlates with IWB, its predictive value decreases after organizational justice is introduced. It is then possible that it is organizational justice that serves as the mediator between LMX and IWB. This conclusion is justified in the context of other research on the relationship of these variables. For example, Ansari, Hung and Aafaqi (2007, p. 703), studying the relations between LMX, procedural justice climate and employee commitment and turnover intention, showed that procedural justice climate serves the role of a mediator between the independent variable and the dependent variables. This is not, however, the only possible interpretation of the research results which were obtained. It is also possible that there is a different relationship, within which it is LMX that becomes the mediator between organizational justice and IWB. For instance, Walumbwa, Cropanzano and Hartnell, (2009, p. 1117), on the basis of their analyses, confirmed the hypothesis which states that LMX is a mediator between organizational justice and voluntary learning behavior. In other words, these authors assume that organizational justice is primary with regard to the perceived social relations. As Cropanzano and colleagues conclude in an earlier study, “[i]n the beginning the [social exchange] relationship is established through organizational justice. Later the existing relationship biases perceptions of the other partner’s behavior [i.e.: the organization failing to fulfill its obligation]” (Cropanzano et al., 2001, p. 62).

Thusly, the issue of what is primary and what is secondary in the relationship of these variables has not been resolved yet, which is reflected in the various ways of approaching these constructs; the so-called organizational justice perspective (Tekleab et al., 2005; Erdogan et al., 2006; Wang et al., 2010) and the leader-member exchange perspective (Scandura, 1999; Cohen-Charash & Spector, 2001). The first approach refers to the earlier cited observations of Cropanzano and colleagues, the second one assumes that the sense of justice is constructed through the relationships with the superior. The path models employed until now do not explain these relations conclusively, and, consequently, further research on the appropriate adjustment of these variables to one another is advisable.

Coming back to the analysis of the obtained results, it is also worthwhile to comment on the direct positive relation between organizational justice and innovative behaviors. These relations are reported also in other studies (Janssen, 2000; Ramamoorthy et al., 2005; Simmons, 2011; Young, 2012). The average correlates for these variables are not high, however, and they fluctuate within the values of $r = 0.1 – 0.2$, while the strongest relation is achieved with regard to procedural justice (Simmons, 2011). It is pointed out here that the perceptions of organizational justice form important determinants of employee judgments about the work environment, which directly translates into their readiness to undertake risks and their motivation for taking action. In a fair work environment, employees may be willing to accept the risk of failure that accompanies innovative activities. Moreover, they will be confident that their ideas will not be dismissed outright
and will be given due attention (Gupta et al., 2012, p. 127). Fair rewards may increase the sense of emotional involvement on the part of the employees (Eisenberger et al., 2001) and influence both higher originality of generated ideas and employees’ readiness for innovative activities related to the stage of implementation. Eisenberger and colleagues (Eisenberger & Armeli, 1997) claim that rewards are positively related to both originality and performance because they can provide helpful information about a person’s outputs, and they provide encouraging input, suggesting that an individual’s work outcomes are valuable. On the other hand, there is also opposite evidence proving that the individuals produce lower levels of creativity when they believe that their rewards depend on their creative performance (Amabile, 1979). In the context of innovative behaviors in a work environment, the issues of fair financial rewards seem, however, a significant factor increasing employees’ motivation for taking action (Ramamoorthy et al., 2005). Also, as Shih and Susanto (2011) point out, justness of the material and non-material rewards contributes to an increased job satisfaction and defusing interpersonal conflicts, and may further reinforce innovativeness in a workplace.

There are some limitations to the research presented here. Firstly, the study involved a relatively small selected sample. The number should be increased in further studies. Moreover, most of the respondents were female with higher education. Thus the results might lack generalizability.

Secondly, the tools employed in the research, and, in particular, the questionnaire for testing organizational justice, could bear some improvement and might treat interpersonal and informational dimension separately, as Colquitt and Shaw (2005) showed that the research of organizational justice should comprise a four-factor construct in which interpersonal justice would be analyzed separately from informational justice.

Thirdly, as the study used cross-sectional data, causal inferences could not be made. Hence, future studies should adopt longitudinal studies.

References


**Biographical Notes**

**Agnieszka Wojtczuk-Turek**, Ph.D. in humanities in the field of Psychology. She is a Assistant professor at the Department of Human Capital Development at the Warsaw School of Economics. In her scientific work she focuses on the topic of competences, employees’ attitudes, organizational behaviors, human capital management and development, person-organization fit, leadership. Expert on social determinants of innovation (projects commissioned by the Polish Agency of Entrepreneurship Development). Author of numerous scientific publications in the area of human capital management. Member of the Youth Team at the Committee of Labour and Social Policy of the Polish Academy of Science.

**Dariusz Turek**, Ph.D. in Economics and an M.A. in Philosophy and Psychology. He is an Assistant professor at the Institute of Enterprise at the Warsaw School of Economics. In his scientific work he focuses on the topic of personal competences, employees’ attitudes, organizational behavior, methodology, ethics and corporate social responsibility. He is the author of numerous scientific publications on the psychology of management and business ethics.