

# EXPECTATIONS AND PERFORMANCE

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## Abstract

In a changing and uncertain environment, the psychological contract becomes more important. This research attempts to explain of the degree of fulfilment of the psychological contract has an effect on solidarity behaviour of employees. Just as the psychological contract, solidarity behaviour is becoming more important. Employees have increasing responsibility for the quality of work and employers expect that employees work together and focus on mutual efforts to achieve the goals of the organization. A vignette-study, including a questionnaire with descriptions of specific situations, is used enabling a systematic and adequate analysis. Results support a positive effect between the degree of fulfilment of the psychological contract and organization solidarity. Theories of social exchange and justice play an important role in the explanation of this relationship. This finding shows that the psychological contract may be an important tool for the management of an organization to influence behaviour of employees. A finding of great value for the management of organizations.

**Keywords:** organizational culture, psychological contract, Solidarity, social exchange, justice

**Paper type:** Research paper

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## 1. Introduction

One of the lessons of the economic upheaval or rather downturn of the last seven years is that we do not only need rules and procedures in and for organisations but also compliance in letter and spirit. You may reward people for following rules or punish them for not doing so (behavioural psychology) but handling the shades of grey in between proves to be more difficult. However, the implicit mechanisms of soft controls may stimulate people to make balanced decisions and to show desirable behaviour.

Organisational culture has been recognised for quite a while as a valid and promising research area but the results are still limited. In order to turn (organisational) culture into an instrument of management more practical knowledge is required. No one-size-fits-all approach will emerge but rather handles and conditions, which may be tailored to the situation of the individual company or manager. Two aspects of organisational culture are the psychological contract and solidarity within organisations.

The first paragraph shows the research question. The second paragraph discusses the wider framework of organisational culture and soft controls. And the concepts of psychological contract and solidarity. The psychological contract deals with the expectations of an employee towards his or her functioning within the organisation. This affects the solidarity between employees and between an employee and his or her manager. The fourth paragraph outlines the research design, aimed at proving the relationship between psychological contract and solidarity, using the theory of social exchange and recognising the influence of justice.

The research question is: what is the relation between the vertical and horizontal solidarity in organisations and the fulfilment of the psychological contract?

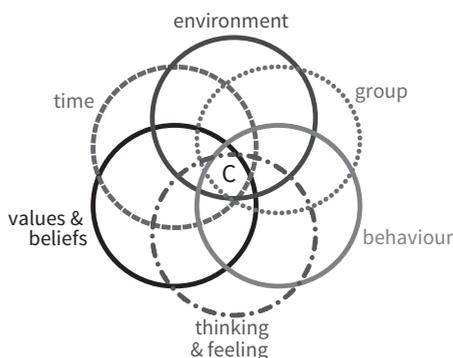
## 2. Framework and concepts

Organisations may be divided in three key types: government, business and the third sector, serving general interests, particular interests and more or less idealistic interests respectively. This division has direct consequences in terms of organisational culture and hence, on the functioning of all and everybody working in and with the organisation in question. This in turn delineates the soft controls a manager may use.

### 2.1. Organisational culture

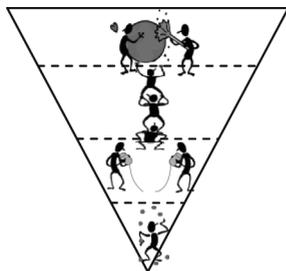
Probably the shortest definition of culture is: culture is an institution (Vroom, 2002). For a sociologist an institution is a way of thinking, acting and feeling. This needs some further specification of terms of groups, time and place. In this sense culture is a way of thinking, acting and feeling of a group of people at a certain time and place (Figure 1).

One of the concepts used for getting more grip on culture has the size of the group as a starting point (Nispen, 2011). The largest group is that of the population of a state, followed by large groups (e.g. employees of an organisation), small



**Figure 1.**  
Graphic definition  
of culture

groups (team, a family) and ultimately coming down to the individual (Figure 2). Ultimately an individual is a member of hundreds of different groups (nationality, gender, profession, sports, religion and so on) and for that reason an individual is juggling hundreds of different cultures (paradigms) all the time in order to cope with the situation at hand.



**Figure 2.**  
Layered culture

Although organisational culture has a link with a national culture, the staff of an organisation is not representative of that national culture. The organisational culture is often quite visible, even while waiting for your appointment in the reception area.

Research in the field of organisational culture is often focused on defining specific types of organisational cultures. A common approach is to construct a two by two matrix, using a horizontal and a vertical axis. One example is the research by Dreimüller (2008). On the basis of the balanced score card one axis is the internal versus external orientation of the organisation and the other axis runs from a preference for control to openness for change. The resulting four organisational cultures (task culture, aim culture, team culture and process culture) are further described according to a series of criteria (core, approach, systems, staff, organisation, communication, success, management style, danger and others).

If you do accept a certain typology, it may well be applied to a specific organisation but only after extensive discussions of the culture of the organisation in question. In that sense the typology is not more than a starting point. Furthermore, an organisation never fits just one type of whatever typology but is rather a combination of different types, showing a preference here or there.

## 2.2. *Soft Controls*

An organisational culture may be strong, giving everybody involved a clear indication of what the organisation stands for. A strong culture risks to become inflexible, resulting in missed opportunities. On the other hand of the scale weak organisational cultures may be recognised, showing a lack of focus, resulting in inefficiency. The culture of a specific organisation lies somewhere in between and is a framework for behaviour of and co-operation between staff. Organisation culture in that sense implies what to do or not to do. These implicit instructions contrast with explicit instructions, the soft and hard controls respectively.

Soft controls are control measures, affecting or appealing to the individual functioning of staff, influencing for instance motivation, loyalty, integrity, inspiration and possibly even norms and values (Lycklama, 2014). Hard controls in contrast are formal measures to enforce desired behaviour. Both types of control aim at the realisation of the objectives.

### **2.3. Concepts**

Next to the psychological contract and solidarity the social exchange theory and justice will be discussed, the latter two as vehicles for clarifying the relation between the former two (Conway and Briner, 2005).

The research indicates that the degree of fulfilment of the psychological contract has its effects on attitudes and behaviour of employees in organisations (Guest, 2004; Rousseau, 1989). However, no research could be found on the relationship between the psychological contract and solidary behaviour of employees. In view of soft controls this might be a very interesting angle for further research.

Just as the psychological contract, solidarity is increasingly important in organisations. As a result of increasing decentralisation and empowerment, employees have an increasing responsibility for the quality of work and employers expect that employees work together to achieve the goals of the organisation (Schaubroeck and Ganster, 1999).

The perception of justice made by employees about a particular party affects the level of social exchange between the employee and that party (Lavelle et al., 2007).

### **2.4. Psychological contract**

The psychological contract may be defined as the individual beliefs of employees and employers concerning their reciprocal obligations (Rousseau, 2005). A psychological contract occurs when one party believes that a promise or a contribution has been made and therefore a liability is created (Rousseau, 1989). A psychological contract is a necessary element of the employment relationship (Farnsworth, 1982). Employment relationships may be considered as exchange relations.

Although this exchange consists of both the relationship between an employee and an organization and between an employee and a supervisor (Settoon et al., 1996), this research focuses on the exchange between organization and employee because the concept of the psychological contract is also concerned at this level (Brink, 2004). According to Lynch et al. (1999) this relationship may be regarded as an exchange of effort and loyalty of the employees for social and emotional benefits (appreciation and recognition) and concrete resources (salary, incentives and secondary conditions). In many situations, there is both a social and economic exchange. The material and immaterial contributions or incentives offered by the employer create an 'obligation' for the employee to respond, through commitment in in-role and extra-role behaviour (Brink, 2004).

The focus will be on the individual ideas of employees, not on the perspective of the employer. Insight in the evaluation of the employee is obtained through

contributions and incentives that the employer provides in the exchange relationship.

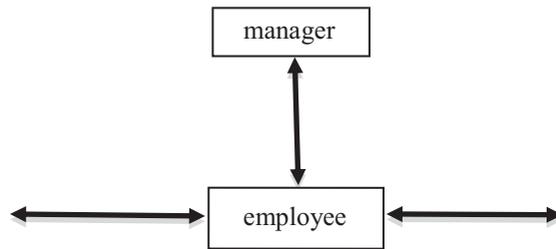
Furthermore, the focus of this study is on measuring the fulfilment of the psychological contract rather than making a distinction in the type of contracts (transactional and relational psychological contracts).

The evaluation of the psychological contract refers to the extent to which expectations are met (Freese and Schalk, 2012). Research into this evaluation has been based on two complementary theoretical arguments. The first is that deficiency leads to negative outcomes. Deficiency robs people of valued rewards, arouses feelings of distributive and procedural injustice, mistrust, betrayal, dissatisfaction and leads to reduced contributions (Coyle-Shapiro, 2002; Robinson and Morrison, 1995b; Robinson and Rousseau, 1994; Rousseau, 1989). Secondly, fulfilment leads to positive results. It creates feelings of confidence, appreciation and enthusiasm and satisfaction (Conway and Briner, 2002; Coyle-Shapiro and Kessler, 2000; Robinson and Morrison, 1995b; Gouldner, 1960). Little attention has been paid to situations where incentives are provided above expected levels (Schurer et al., 2003). Research shows that in some cases organisations could benefit from over-fulfilment of the psychological contract of employees (Shore and Barksdale, 1998). In this study the full range from over- to under-fulfilment will be considered.

Rousseau (1998) developed an instrument for investigating the degree of fulfilment of the psychological contract, consisting of a list of incentives that determine how employees evaluate the employment relationship. The four different dimensions in question are career perspective, relationships with others, job content and compensation. According to Rousseau (1995) two dimensions of psychological contract are embedded in the transactional – relational contract continuum, compensation (e.g. salaries and bonuses) and career perspective. These last two dimensions are included in the four of the instrument and have for this reason selected for this study. The higher the score on the individual dimensions, the more employees actually perceive that more is received than promised.

### ***2.5. Solidarity***

This research examines whether the psychological contract also affects the solidary behaviour (organisational solidarity), both vertically (employee – manager) and horizontally (employee – employee). Both relationships are important because employees within the organisation have their most important relationships with their manager and other employees within the organisation. However, Koster (2005; 2014) suggests that these two types are different. Employees may show solidary behaviour towards the manager, but this does not mean that they behave to the same degree of solidarity towards other employees and vice versa.



**Figure 3.**  
Employment relationships

Solidary behaviour can in this way be defined as the degree to which employees help colleagues (horizontal) and the manager (vertical) to complete a task, the degree to which employees are trying to recover mistakes during work, the extent to which employees make an apology when they make mistakes and the extent to which the employee has fairly shared tasks and fulfils agreements (Koster and Sanders, 2006).

An employee acts in solidary way as he contributes through private resources (without financial compensation) to realise collective purposes. Solidary behaviour may occur due to a stimulus. In this study the degree of fulfilment is considered as a stimulus. Stimuli are perceived by the individual and have an effect on memory. The memory consists of values, perceptions, beliefs, alternatives and other knowledge. A stimulus can evoke some of these stored values, experiences and perceptions, which the employee considers particularly relevant to the situation. Different stimuli may result in different (solidary) behaviour (March and Simon, 1993).

Organisational solidarity is related to other cooperative types of organizational behaviour, like Organisational Citizenship Behavior (Organ, 1988). Nevertheless, while OCB refers to an overall prosocial attitude of employees, the concept of organisational solidarity explicitly assumes that employees' cooperation may vary across horizontal and vertical relationships (Koster, 2005). The willingness to help others is largely a feature of the relationship between people (Koster and Sanders, 2006; Sanders, Emans and Koster, 2004). An employee may behave in an extraordinary solidary way in one relationship and extremely divisive in another relationship (Sanders, 2005). Koster (2005) found strong evidence for the phenomenon that an employee shows solidary behaviour towards the manager and other employees if they also show solidarity towards the employee. Hence, the mechanism of reciprocity needs to be checked by taking the receipt of solidarity from the manager and other employees into account as a control variable.

## ***2.6. Social Exchange***

The psychological contract works on the system of social exchange (Conway and Briner, 2005). In the context of the psychological contract the main reason

for employees to be involved in social exchange may be found in the fact that employees feel obliged to do something in return when they receive benefits (Conway and Briner, 2005). This idea is central in the social exchange theory and is based on the norm of reciprocity of Gouldner (1960).

Fulfilment of the psychological contract is therefore expected to be positively related to organisational solidarity; a higher degree of fulfilment is accompanied by more solidary behaviour (vertically and horizontally). When an employee receives a promotion unexpectedly, it may lead to perceptions of over-fulfilment. In contrast, not receiving a promotion, may lead to perceptions of under-fulfilment.

### *2.7. Justice*

In the past decade, scientists have increasingly paid attention to fairness in the workplace. This interest stems from the recognition that justice entails practical advantages. Employees who are treated fairly have a stronger tendency to provide higher contributions. Justice describes the perceptions of employees about the fairness of the treatment that employees received from the organisation and their response to such perceptions (James, 1993).

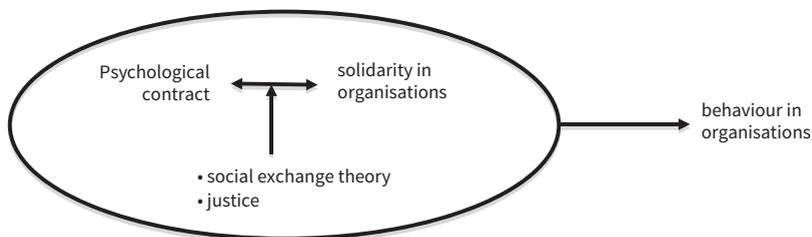
In line with equity theory (Adams, 1965), employees respond to the way in which they are treated relative to how similar others (colleagues) are treated. Wood (1996) defines this social comparison as a process of thinking about information of one or more others in relation to yourself. On the basis of this social equation, perceptions of justice are formed about several parties. This study focuses on the traditional approach to the theory of justice or the justice in the distribution. This approach describes the justice of the outcome (discrete evaluations of specific allocation decisions) to which the evaluation of the psychological contract relates (Cropanzano and Greenberg, 1997). The employee perceives justice about decisions. This study shows the allocation decisions regarding 'compensation' and 'career prospects'.

In line with the choice made in relation to solidarity three states of justice may be distinguished: under-justice, justice and over-justice. When an employee is experiencing under-justice, values and norms will be harmed and employees will feel undervalued and experiencing feelings of anger (Stouten, 2006; Robbins and Judge, 2011). These emotions may turn into certain negative actions with major implications for the employer (Stouten, 2006). Under-justice will probably have a negative impact on the social exchange and is expected to decrease the degree of solidarity towards the manager and other employees. In contrast, justice can result in positive emotions leading to positive actions. The employee experiences equality, which may create feelings of satisfaction (depending national culture). Expected is that justice will therefore have a positive impact on the social exchange, allowing for solidary behaviour towards the manager and other employees and possibly an increase. In case of over-justice the employee feels overvalued. You

may receive a bonus, while a colleague has worked much harder but is not getting the bonus. The assumption is that this situation lead to feelings of guilt and the employee may compensate the unfair bonus by more solidary behaviour towards the manager and colleagues (Robbins and Judge, 2011). Over-justice is expected to have an even greater positive impact on the social exchange than justice.

### 3. Research Design

In view of the lack of earlier research, this study has an exploratory nature because the relationship between fulfilment of the psychological contract and organisational solidarity has not previously been investigated. In the first phase of the research the literature study clarified the relevant concepts and their mutual relationship (above). The second phase had an evaluative nature. By use of a so-called vignette study the relation between the vertical and horizontal organisational solidarity and the degree of fulfilment of the psychological contract was explored.



**Figure 4.**  
Conceptual relations

On the basis of the first phase the following hypotheses were formulated.

- Hypothesis 1: Vertical solidarity in organisations is positively related to the degree of fulfilment of the psychological contract.
- Hypothesis 2: Horizontal solidarity in organisations is positively related to the degree of fulfilment of the psychological contract.
- Hypothesis 3: The degree of (perceived) justice strengthens the relationship between vertical organisational solidarity and the fulfilment of the psychological contract.
- Hypothesis 4: The degree of (perceived) justice strengthens the relationship between horizontal organisational solidarity and the fulfilment of the psychological contract.

#### 3.1. Vignette Research

A vignette study is a research strategy that enables researchers to focus on specific independent variables using experimental conditions (Koster, 2005). It is a valid and reliable instrument for measuring the perceptions of respondents. A vignette study provides descriptions of specific situations and attempts to create

a ‘reality’ for respondents (Alexander and Becker, 1978). Because of the context abstract reasoning is no longer required (Morrison et al., 2004).

### 3.2. Variables

Organisational solidarity, the vertical and horizontal solidary behaviour of employees, was used as a *dependent variable*. Koster classified five positive forms of solidary behaviour. This vignette study uses only two forms of solidary behaviour: helping and keeping appointments. In a given situation, using different conditions the respondent is asked whether he is willing to help or keep an appointment hand with colleagues or with the supervisor. For the measurement of vertical and horizontal organisational solidarity a 10-point scale is used, running from 1 (definitely not) to 10 (certainly is). Psychological contract fulfilment was used as an *independent variable*. It represents the extent to which expectations are met (Freese and Schalk, 2012). This fulfilment of expectations is specified in terms of promotions, in line with the instrument of Rousseau (1989). The types of fulfilment are incorporated in the conditions of the vignette study and are consistent with the context.

Justice has been used as a *moderating variable* and is defined as acting for honesty and fairness (Syroit et al., 2007). The vignette study specifically focuses on justice in the distribution of promotions among employees. The degree of justice may be varied. The different forms of justice are incorporated in the conditions of the vignettes research and give more substance to the context.

For this study also a number of *statistical control variables* have been included on both the vignette and the individual level. Regarding the former received solidarity from the manager is considered in the context of vertical organisational solidarity and solidarity received from a colleague is considered in the context of horizontal organisational solidarity. Both control variables vary in two different conditions, whether solidarity is received or not. Finally and only in case of vertical solidarity, responsibility of the executive for the distribution of promotions in the organisation is incorporated. This control variable varies in two different conditions, having responsibility for the distribution of promotions or not.

*Control variables on the individual level* consist first of a number of individual characteristics (sex, age, function and permanent contract). One aspect of the research was whether the type of environment in which the employee works has an effect on the relationship between the degree of fulfilment of the psychological contract and organisational solidarity. The type of environment is measured by two variables, industry and organisation size. Thirdly, whether the respondent considered the situations described in the vignette as realistic or not was checked. This assesses the degree to which the vignette research approaches the reality. It is measured on a scale from 1 (certainly unrealistic) to 10 (certainly realistic).

A low score implies that the vignette study only approaches reality to a limited degree and makes it less valuable. The control variables at the individual level are reflected in the questions at the end of the vignette study.

### 3.3. Respondents

Respondents to the vignette survey are randomly selected from the personal and professional network. Their characteristics may be found in Table 1.

<b>Gender</b>		<b>Branch</b>	
• Male	44	• Agriculture, Forestry and Fisheries	1
• Female	56	• Mineral Resources, Industry & Energy	6
		• Construction Industry	2
<b>Average age</b>	36 years	• Trade, Transportation & Hospitality	21
		• Information & Hospitality	7
<b>Education Level</b>		• Financial Services	3
• Primary school	1	• Rental & Trade Real Estate	8
• Secondary school	8	• Business Service	7
• Lower vocational education	1	• Government	8
• Intermediate vocational education	28	• Education	5
• Higher professional education	39	• Health & Welfare	18
• University	23	• Culture & Recreation	2
		• Other	14
<b>Function</b>		<b>Organisation Size</b>	
• Employee	67	• Small organisation (< 25)	40
• Manager	14	• Medium-sized organisation (26–100 )	20
• Other	19	• Large organisation (> 100)	40
<b>Permanent Contract</b>			
• Yes	60		
• No	40		

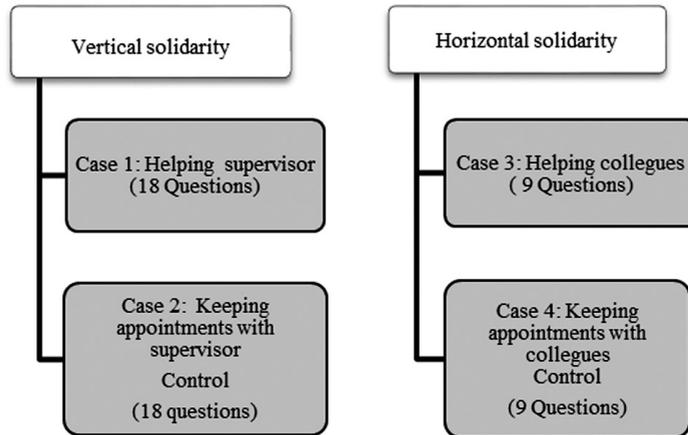
**Table 1.**  
Characteristics  
respondents in %

### 3.4. Structure of the Vignette Study

This research used the traditional vignette research, consisting of short situation sketches in the workplace (Morrison et al., 2004). Through cases the vignette study assesses the relationship between the degree of fulfilment of the psychological contract and organisational solidarity exists. Additionally the moderating role of justice and the control variables have been included.

Vertical and horizontal solidarity are empirically distinguished in the vignette study. Two cases consider whether the respondent will show solidarity towards

colleagues and two cases consider whether the respondent will show solidarity towards the supervisor. In case 1 and 2 exactly the same questions are asked and as a result a control mechanism is built in. The same applies to case 3 and 4 (Figure 5).



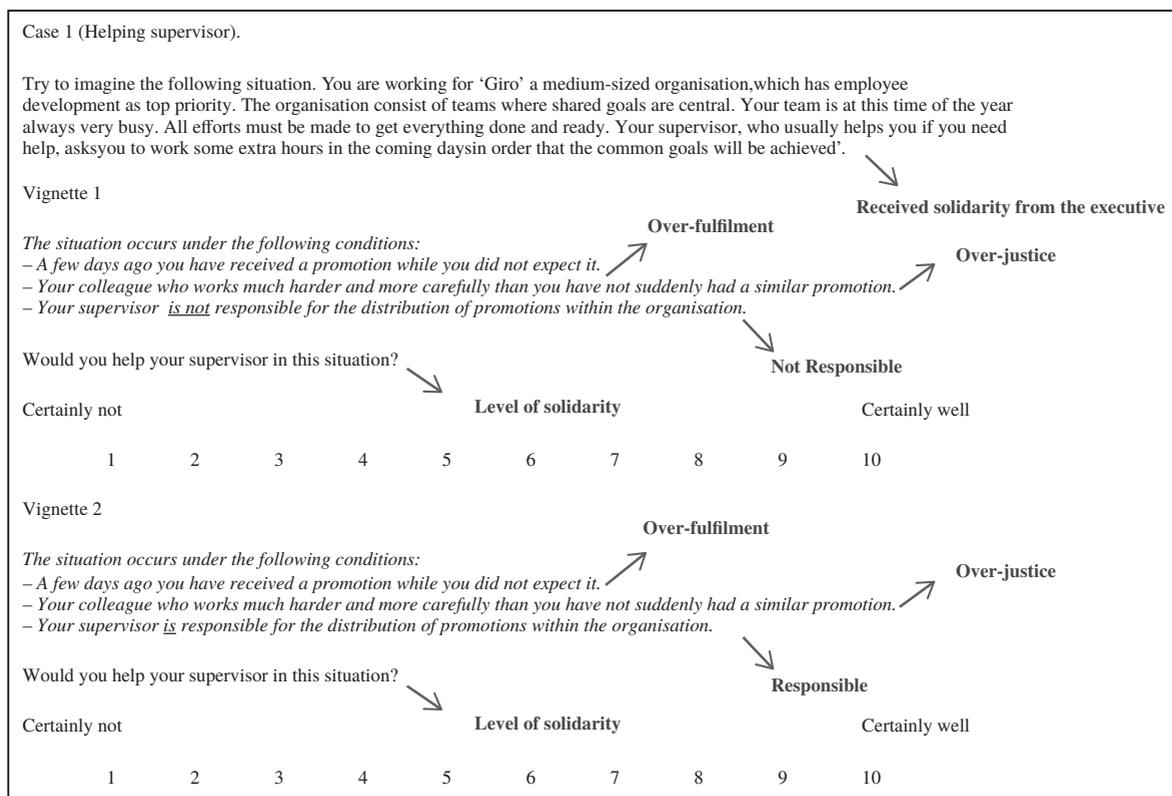
**Figure 5.**  
Structure vignette

Below an example of a vignette may be found, consisting of a short description of a situation in the workplace (Figure 6). The description of the situation is the fixed part of the vignette. In this fixed part the statistical control variable ‘received solidarity from the executive’ is incorporated. The conditions vary continuously until all options have been exhausted. All together 36 possible vignettes have been developed and submitted to the respondents.

The structure of the vignette on horizontal solidarity is almost the same. In the fixed part the statistical control variable ‘received solidarity from a colleague’ has been incorporated. In the same vein the conditions vary until all options have been exhausted. The conditions for horizontal solidarity include only fulfilment and justice. Less variables imply less possibilities of variation and because of this the horizontal solidarity exists only of 18 possible vignettes.

On the basis of the cases respondents were questioned on both vertical and horizontal solidarity, indicating to what degree they are willing to help the supervisor or colleagues, depending the specific conditions. They were asked to indicate the likelihood that they will provide help to this person (on a 10-point scale).

The level of solidarity is assumed to be affected by the context (Koster, 2005), next to individual preferences for showing solidarity. Because respondents are asked to respond to 36 plus 18 different vignettes, they may show variation in their intention to help the supervisor / colleagues. Multilevel regression



**Figure 6.**  
Example case  
vertical solidarity

analysis (Bryk and Raudenbush, 1992) is applied to estimate how much of the respondent's solidarity is an effect of individual preferences or of the experimental conditions.

#### 4. Results

Table 2 shows the most important results in terms of significance of vertical organization solidarity. The analysis of **vertical** organization solidarity started with the calculation of an empty model (model 0). Then the control variables at the individual level were added (model 1). Although the addition of the control variables at the individual level yields a significant improvement compared to the empty model ( $d=20.68$ ,  $p=< 0.01$ ), only the 'reality of situation sketches' is significantly related to vertical organization solidarity ( $b=0.21$ ,  $p=< 0.01$ ). This means that the more the sketches are experienced as realistic by a respondent, the more solidarity the respondent shows towards his or her supervisor. The other individual control variables show no significant relationship with vertical organization solidarity. Next, in model 2 the control variables on vignette level

are added to model 1. This addition provides a significant improvement of the model ( $d=50.09$ ,  $p=<0.01$ ). Responsibility, is negatively related to vertical organization solidarity ( $b=-0.35$ ,  $p=<0.01$ ). This means that fewer respondents act solidary towards the supervisor, when the supervisor is more responsible for the distribution, e.g. promotions in the organization. Solidarity received from the supervisor is positively related to vertical organization solidarity, indicating that respondents will be more solidary towards the supervisor, as the supervisor is more solidary towards the respondent ( $b=0.14$ ,  $p=<0.01$ ). In model 3 the independent variable fulfilment and the moderating variable justice are included. The addition of these variables results in a significant improvement of the model ( $d=686.50$ ,  $p=<0.01$ ). In accordance with the expectations the degree of fulfilment is positively related to vertical organization solidarity ( $b=0.77$ ,  $p=<0.01$ ). This means that the more fulfilment respondents perceive, the more they will be solidary towards the supervisor. Hence, hypothesis 1 can be accepted. Justice is also positively related to vertical organization solidarity ( $b=0.37$ ,  $p=<0.01$ ). This means that the more respondents experience justice in the distribution of promotions the more supportive they will be in the direction of the supervisor. Finally, the moderation effect is examined in model 4. The model deteriorates ( $d=-1.53$ ,  $p=n.s.$ ). The effect itself is only significant at 10%, which is considered insufficient. Insufficient evidence for a moderating effect of justice is found regarding on the relationship between fulfilment of the psychological contract and vertical organization solidarity ( $b=0.06$ ,  $p=<0.1$ ), which implies that hypothesis 3 is rejected.

model	(1)	(2)	(3)	(4)
<b>Intercept</b>				
<i>Vertical solidarity</i>	5.26 (0.88)♣	5.36 (0.88)♣	4.21 (0.88)♣	4.15 (0.88)♣
<b>Individual control variable (level 2)</b>				
Reality of situation sketches	0.21(0.07)♣	0.21 (0.07)♣	0.21 (0.07)♣	0.21 (0.07)♣
<b>Vignette features (level 1)</b>				
<i>Responsibility</i>		-0.35 (0.05)♣	-0.35 (0.05)♣	-0.35 (0.04)♣
<i>Vertical solidarity received</i>		0.14 (0.05)♣	0.14 (0.04)♣	0.14 (0.04)♣
<i>Fulfilment</i>			0.77 (0.03)♣	0.83 (0.04)♣
<i>Justice</i>			0.37 (0.03)♣	0.43 (0.04)♣
<i>Fulfilment ♣ Justice</i>				-0.06 (0.03)♣

**Table 2.**  
the most important  
results in terms  
of significance of  
vertical organization  
solidarity

model	(1)	(2)	(3)	(4)
-2*log likelihood	16886.73	16836.69	15976.69	15978.22
Deviance	20.68♣	50.09♣	686.50♣	-1.53
Variance level 2	1.19	1.20	1.21	1.21
Variance level 1	2.70	2.67	2.17	2.17
Intraclass correlation coefficient (ICC)	0.31	0.31	0.36	0.36

N = 120; 4320 vignette. The standardized regression coefficients are reported; standard errors are in parentheses. Empty model: -2 Log Likelihood = 16907, 41.; ICC = 0.33; Intercept = 6.83; ♣ p < 0.1 ♥ p < 0.05; ♠ p < 0.01.

**Table 2.**  
continued

Table 3 shows the most important significant results of horizontal organization solidarity. The analysis of horizontal organization solidarity has also started with the calculation of an empty model (model 0). After this, the control variables are added at the individual level (model 1). Although the addition of the control variables at the individual level yields a significant improvement compared to the empty model ( $d = 15.71$ ,  $p < 0.05$ ), again only the ‘reality of cases’ is significantly related to vertical organization solidarity ( $b = 0.16$ ,  $p < 0.05$ ). This means that the more the respondent experiences the sketches as realistic, the more solidarity a respondent shows towards his or her colleague. The other individual control variables show no significant relationship with horizontal organization solidarity. In model 2 the control variables on vignette level are added. This addition provides a significant improvement of the model ( $d = 704.51$ ,  $p < 0.01$ ). Solidarity received from colleagues is positively related to horizontal organization solidarity ( $b = 2.00$ ;  $p < 0.01$ ), indicating that respondents will be more solidary towards a colleague, when the colleague acts more solidary towards the respondent. In model 3 the independent variable fulfilment and the moderating variable justice are added. The addition of these variables results in a significant improvement of the model ( $d = 246.16$ ,  $p < 0.01$ ). In accordance with the expectations the degree of fulfilment is positively related to horizontal organization solidarity ( $b = 0.38$ ,  $p < 0.01$ ). This means that the more fulfilment respondents perceive, the more they will be solidary towards a colleague and thus hypothesis 2 may be accepted. Justice is also positively related to horizontal organization solidarity ( $b = 0.53$ ,  $p < 0.01$ ); the more justice respondents experience in the distribution of promotions, the more supportive they will be in the direction of a colleague. Finally, the moderation effect is examined in the model. A negative impact can be observed ( $b = -0.18$ ,  $p < 0.01$ ). Respondents are least likely to show solidarity towards colleagues if they experience low performance in combination with low justice. In contrast, respondents who have a high performance combined with a high experience of justice will be most likely act solidary towards colleagues. On the basis of these findings hypotheses 4 can be assumed.

EXPECTATIONS  
AND  
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model	(1)	(2)	(3)	(4)
<b>Intercept</b>				
<i>Horizontal solidarity</i>	4.90 (0.10)♣	3.88 (1.10)♣	2.95 (1.00)♣	2.76 (1.00)♣
<b>Individual control variable (level 2)</b>				
Reality of situation sketches	0.16 (0.08)♣	0.16 (0.08)♣	0.16 (0.08)♣	0.16 (0.08)♣
<b>Vignette features (level 1)</b>				
<i>Horizontal solidarity received</i>		2.00 (0.07)♣	2.00 (0.07)♣	2.00 (0.06)♣
<i>Fulfilment</i>			0.38 (0.04)♣	0.56 (0.06)♣
<i>Justice</i>			0.53 (0.39)♣	0.71 (0.06)♣
<i>Fulfilment * Justice</i>				-0.18 (0.05)♣
-2*log likelihood	9136.81	8432.30	8186.14	8176.10
Deviance	15.71♣	704.51♣	246.16♣	177.98♣
Variance level 2	1.46	1.52	1.53	1.53
Variance level 1	3.60	2.54	2.25	2.23
Intraclass correlation coefficient (ICC)	0.29	0.37	0.40	0.41

N= 120; 2160 vignette The standardized regression coefficients are reported; standard errors are in parentheses. Empty model: -2 Log Likelihood=9152.52.; ICC=0.29; Intercept=6.44; ♣ p < 0.1 ♥ p < 0.05; ♠ p < 0.01.

**Table 3.**  
the most important  
significant results  
of horizontal  
organization  
solidarity.

## 5. Conclusions and further perspectives

The statistical analysis shows a positive relationship between the degree of fulfilment of the psychological contract and vertical and horizontal organisational solidarity. Therefore hypotheses 1 and 2 can be accepted. The social exchange theory plays an important role in this relationship. As employees expectations are met or surpassed, employees feel obliged to behave in a solidary way toward the organization in return. These findings are consistent with several studies, suggesting that positive outcomes lead to fulfilment of the psychological contract. Based on the norm of reciprocity, failure to meet expectations leads as expected to less solidary behaviour than when expectations are met. This finding confirms the literature that deficiency leads to negative outcomes.

Moreover, the degree of fulfilment of the psychological contract mainly affects the vertical solidarity behaviour. Due to the higher hierarchical position in the organization the supervisor is held responsible for the fulfilment of expectations but colleagues are not. Unsurprisingly the effect on horizontal solidary is small and the extent to which a colleague acts solidary towards the employee has a much stronger influence on the extent to which the employee acts solidary towards colleagues.

Furthermore, the analysis suggests that employees will show more vertical and horizontal solidarity if they experience more justice in the distribution of

promotions. This finding is consistent with the study of Rupp and Cropanzano (2002) which states that employees tend to show higher employee contributions when they are treated fairly. However, the justice theory appears to offer only an important explanation with regard to the relationship between the degree of fulfilment of the psychological contract and organizational solidarity in case of horizontal solidarity. Therefore hypothesis 4 may be accepted and hypothesis 3 rejected. Only in case of horizontal solidarity a moderation effect can be observed. This moderation effect specifically indicates that employees are the least solidary towards colleagues, when they experience a low degree of fulfilment and a low degree of justice. No significant moderation effect can be observed in case of vertical organization solidarity.

Employees keep the supervisor responsible for the degree of fulfilment. If the supervisor fails to meet expectations, possible negative emotions make the degree of distributive justice irrelevant. Colleagues are not held responsible for the degree of fulfilment, because negative emotions by under-fulfilment may be expressed to a lesser degree towards colleagues. However, when an employee is also treated unfairly, the negative emotions may climax and seen in the solidary behaviour towards colleagues.

Interestingly, the findings clearly show how the degree of fulfilment of the psychological contract is related to vertical and horizontal organizational solidarity. They contribute to a better scientific understanding, complementing the frame of Guest (2004) by adding organisational solidarity as a possible consequence of the degree of fulfilment of the psychological contract. Although this relationship is not previously examined, understanding of this relationship is a necessary requirement. Because increasing globalization, restructuring, layoffs and changes are permeating all organisational life today is, the psychological aspect is becoming increasingly important for defining and understanding labour relations (McLean Parks and Kiddler, 1994).

The psychological contract may be an important tool for the management of an organization to influence behaviour of employees. It can be seen as a soft control: a tool to effect motivation, loyalty, integrity and of course solidarity. However, this study shows that the tool is only valuable as mutual expectations are clear and the distribution among employees is justified. Communication is of great importance. Managers should regularly take time to discuss mutual expectations and take time to discuss and justify major (distribution) decisions. Only then they can stimulate and activate employees in a positive way to act solidary towards supervisors and colleagues.

Finally, this study confirms that soft controls are equally important as hard controls. Managers have to find the right balance between both. The right balance is dependent on the desired organisational culture. The desired organisational

culture may well differ between countries. In some countries for example a preference for a strong hierarchy may exist. Broadening this research to other countries is therefore recommended.

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