

08-12-2016
Master thesis Business Administration
University of Twente
School of Management and Governance
Chair of Technology Management

# Satisfying suppliers in order to become a preferred customer

The influence of three major social variables on this process



## Robbin van der Lelij

S1219502 CONTACT E-MAIL: **R.VANDERLELIJ@STUDENT.UTWENTE.N**L

1ST SUPERVISOR: **PROF. DR. HABIL. HOLGER SCHIELE** 2ND SUPERVISOR: **DR. NIELS PULLES** EXTERNAL SUPERVISOR: **NATACHA NAUMANN** PRACTICAL SUPERVISOR: **FREDERIK VOS, MSC** 

NUMBER OF PAGES/WORDS: 67/30306 BIBLIOGRAPHY PROGRAM USED: ENDNOTE Acknowledgements

In front of you lies my master thesis about the influence of three major social variables

(conflict, power and status) on supplier satisfaction and becoming a preferred customer.

This thesis is the final part of my graduation from the Master of Business Administration

(track: Purchasing and Supply Management) at the University of Twente. This was not

easy, luckily there were a number of people who have supported and helped me during this

period.

First, I would like to thank Nick Praas for his contributions to this thesis. The joint research

direction gave us the opportunity to share parts of our work. I have leveraged elements of

his theory, learnings and findings on preferred customer status, which I have incorporated

into this thesis as chapter 2. I really enjoyed our collaboration.

Second, I want to thank the employees of the purchasing department of the University of

Twente. I was always welcome and enjoyed my time at the department. And I want to

thank them for their contributions to the research (process).

Third, a major thank you to my supervisors prof. dr. Holger Schiele and dr. Niels Pulles for

reviewing this thesis, providing feedback for further improvements and finally grading this

thesis. Also, a big thank you to Frederik Vos for his practical support throughout the entire

process. Without it, this would be a lot harder.

Finally, I would like to thank my family and friends, who always supported me. This gave

me the strength to finish. Thank you all!

Robbin van der Lelij

08-12-2016

I

#### Abstract

In many firms the role of purchasing has changed from just a buying function into a strategic function which can create a competitive advantage. A competitive advantage can be reached by becoming a preferred customer of a supplier and, by that, getting a preferential treatment from this supplier. Supplier satisfaction is seen as a necessary condition to receive a preferred customer status. This study examines the influence of three major social concepts (conflict, power and status) on the process of satisfying suppliers and becoming a preferred customer. Data is gathered amongst suppliers of a public organisation and analysed with PLS path modelling software. The results show that the use of coercive power has an indirect effect on the level of supplier satisfaction, which is mediated by conflict. Reward power does not have an influence on supplier satisfaction. Further, having a high status as a buyer increases the chance of receiving a preferred customer status. Finally, this study provides suggestions for buyers to better satisfy the suppliers and increase the chances of becoming a preferred customer. Also future research possibilities are discussed.

Keywords: supplier satisfaction; preferred customer status; coercive power; reward power; conflict; status; conflict resolution

## **Table of Contents**

A	cknowledgements		
A	bstract	ا	
L	ist of abbreviations	V	
L	st of tables		
L	ist of figures	V	
1.			
2.	Striving for a preferred customer status to gain preferential treatment of suppliers	4	
	2.1 The preferred customer status as a special kind of buyer-supplier relationship	4	
	2.2 Benefits of a preferred customer status: preferential resource allocation and econobenefits		
	2.3 Customer attractiveness and supplier satisfaction as antecedents for preferred customer st		
3.	Supplier satisfaction, a necessary condition for preferred customer status	10	
	3.1 Supplier satisfaction, when the outcome of the relationship meets the expectations of supplier		
	3.2 The findings of supplier satisfaction in 2000-2010, the development of the empirical bas the concept		
	3.3 State of the art, the nine dimensions of supplier satisfaction	18	
	3.4 Ensuring the satisfaction of suppliers to gain additional benefits from the relationship	19	
4.	Power, different ways of controlling	20	
	4.1 History of the concept power, a mechanism to control	20	
	4.2 Power as a function of sources of power	22	
	4.3 Classification of the sources of power into dichotomous groups	24	
5.	Conflict, the perception of differences of interest	26	
	5.1 Conflict, disagreements due striving to achieve own goals	26	
	5.2 Conflicts in organisations, it has not only negative consequences	28	
6.	Status, a subjective judgement of rank	30	
	6.1 Status in organisational theory, a borrowed concept from sociology	30	
	6.2 Status in relationships, three different function	31	
7.	Hypotheses	36	
	7.1 Coercive power has a negative influence on supplier satisfaction, while reward popositively impacts supplier satisfaction		
	7.2 Conflict is influenced by the use of power	38	
	7.4 Conflicts has a negative influence on the level of satisfaction	41	

	7.5 Not all the conflicts have a negative impact on supplier satisfaction	42
	7.6 Status weakens the effect of coercive power on supplier satisfaction and strengthens effect of reward power	
	7.7 Status helps to receiving a preferred customer status	45
	7.8 Supplier satisfaction leads to preferred customer status	46
8.	Methodology	47
	8.1 The University of Twente, a special case	47
	8.2 Systematic literature search	48
	8.3 Survey design and measures used	49
	8.4 Data collection and sample	50
	8.5 Statistical method	52
	8.6 Data structure quality assessment and model validity and reliability	53
9.	Results	57
	9.1 Results of the partial models	57
	9.2 Results of the full model	58
1(	Discussion and implications	61
1(	0.1 Discussion of the results	61
	10.2 The implications	63
1	1. Limitations and future research	65
	11.1 Limitations of this research	65
	11.2 Future research possibilities	66
В	ibliography	68
A	nnexures	В
	Appendix A – IPSERA 2017 paper	В
	Appendix B – Replication of the improved model of Vos et al. (2016)	T
	Appendix C – used measures	U
	Appendix D – results non-response bias test	V
	Appendix E – results comparison revenues of respondents and non-respondents	X
	Appendix F – results factor analysis	Y
	Appendix G – The model of Vos et al. (2016) combined with this research	Z

## List of abbreviations

AVE =  $\underline{A}$ verage  $\underline{V}$ ariance  $\underline{E}$ xtracted

 $EU = \underline{E}uropean \underline{U}nion$ 

 $GDP = \underline{G}ross \underline{D}omestic \underline{P}roduct$ 

HTMT= <u>H</u>etero<u>t</u>rait-<u>m</u>ono<u>t</u>rait

OEM = Original Equipment Manufacturer

PLS =  $\underline{P}$ artial  $\underline{L}$ east  $\underline{S}$ quares

 $SEM = \underline{S}tructural \underline{E}quation \underline{M}odelling$ 

SET =  $\underline{S}$ ocial  $\underline{E}$ xchange  $\underline{T}$ heory

 $SRMR = \underline{S}tandardised \underline{R}oot \underline{M}ean square \underline{R}esidual$ 

UT =  $\underline{U}$ niversity of  $\underline{T}$ wente

## List of tables

Table 1. Antecedents of preferred customer status adapted from Hüttinger et al. (2012)8
Table 2. Overview of the studies to supplier satisfaction and their findings (2000-2010)14
Table 3. Definitions of power and their properties adapted from Sturm and Antonakis (2015)22
Table 4. Overview of the classification of the power sources into dichotomous groups25
Table 5. Literature search details
Table 6. Characteristics of sample
Table 7. Reliability and validity (1)
Table 8. Means, Standard Deviations, and Correlations of the Constructs57
Table 9. Reliability and validity (2)
Table 10. Results of the partial models
Table 11. Bootstrap and effect statistic of the model (bootstrap samples = 5000)61
List of figures
Figure 1. Preferred customer pyramid
Figure 2. The improved model of Vos et al. (2016)19
Figure 3. Conceptual research model
Figure 4. Results from PLS path modelling

## 1. Purchasing as a value-added resource for a firm

These days, firms spend more and more of their budgets on its suppliers for goods and services in order to deliver on their businesses' core strategies. A study in 2013 of almost 2,000 publicly traded companies found that on average 70 per cent of the firms' revenue is spent on suppliers. In the past three years, the external spend as a percentage of the revenue has increased by almost 4 per cent. This points out the importance of purchasing. However, it took a long time before this importance was recognised. Historically, the role of purchasing was mainly to purchase the products the company needs to do business as cheap as possible. By the growing recognition of the importance of purchasing, caused by rapid external environmental and internal organisational changes due to increasing outsourcing, globalisation and later e-business<sup>4</sup>, in many firms the role of purchasing has changed from just a buying function into a strategic function. Instead of getting results in the short-term (by purchasing for the lowest price), the focus shifted to, as the word 'strategic' already reveals, the long-term. Companies recognised the advantages of strategically managing their resources to become more competitive. Therefore, purchasing became a value-added resource to the firm.

An important factor for the value creation by purchasing is the management of the relationships with suppliers. A good buyer-supplier relationship can lead to certain advantages (such as higher efficiency and flexibility) and even to a sustainable competitive advantage.<sup>7</sup> A competitive advantage can be reached by becoming a preferred customer of a supplier and, by that, getting a preferential treatment from this supplier compared to other buyers (and perhaps competitors).<sup>8</sup> In order to become a preferred customer, it is necessary to satisfy the supplier.<sup>9</sup> An unsatisfied supplier will probably not doing the best it can to help the buying company and may produce products of less quality.<sup>10</sup> The process of satisfying the supplier and becoming a preferred customer does not only depend on

\_

<sup>&</sup>lt;sup>1</sup> See Eatough (2014)

<sup>&</sup>lt;sup>2</sup> See Proxima (2013)

<sup>&</sup>lt;sup>3</sup> See Benton & Maloni (2005) p. 1

<sup>&</sup>lt;sup>4</sup> See Spina, Caniato, Luzzini, & Ronchi (2013) p. 1202

<sup>&</sup>lt;sup>5</sup> See Ellram & Carr (1994) pp. 13-15

<sup>&</sup>lt;sup>6</sup> See Carr & Pearson (1999) pp. 497-498

<sup>&</sup>lt;sup>7</sup> See Nyaga, Whipple, and Lynch (2010), p. 101

<sup>&</sup>lt;sup>8</sup> See Vos, Schiele, and Hüttinger (2016), p. 4618

<sup>&</sup>lt;sup>9</sup> See Hüttinger, Schiele, and Schröer (2014), p. 711; Vos et al. (2016), p. 4618

<sup>&</sup>lt;sup>10</sup> See Snyder (2003; cited by Meena & Sarmah (2012) p. 1236

economic factors, also relational and social behaviour are important. Therefore, the influence of the three main concepts of the sociology (status, power and conflict) on this process will be examined in this study. Thereby, this study deepens the influence of social concepts on supplier satisfaction and preferred customer status. Since these two concepts are important for firms in order to get a competitive advantage by purchasing, it is important to find all relevant antecedents for these concepts. Therefore, the research question of this thesis is:

- What is the influence of power, status and conflict on supplier satisfaction in order to become a preferred customer?

This question is relevant, since no study before tested the influence of these major social constructs together on supplier satisfaction and preferred customer status. Hence, this research contributes to the literature by testing the interaction effects of these concepts instead of only the individual effects of the concepts. Past research already showed that coercive power and conflict separately can have a negative impact on the quality of a relationship and the level of satisfaction<sup>12</sup>, but the role of conflict induced by the use of coercive power has not been researched yet. Next to this, it will be assessed whether reward power contributes positively to supplier satisfaction in addition to these negative effects. This study also takes the effect of conflict resolution on the impact of conflicts into account. Besides this, the research includes the effect of the buyer's status on the relationship between power and satisfaction and becoming a preferred customer. Status is a social concept that has recently received intensive attention by management scholars and has been argued to influence plenty of individual and corporate-level perceptions of relational aspects.<sup>13</sup> Since it appears to have an influence on relational benefits, this concept is applied in this research to buyer-supplier relationships. Therefore, new insights are added to the study of inter-organisational status dynamics and their influence on relational aspects, such as power and preferred customer status. From a practical perspective, this research identifies whether the negative effects of the use of coercive power and conflict on supplier satisfaction can be alleviated by the effects of reward power and status. Also the impact of the buyer's in becoming a preferred customer is studied. For

11

<sup>&</sup>lt;sup>11</sup> See Vos et al. (2016) p. 4621

<sup>&</sup>lt;sup>12</sup> See Brown, Lusch, & Nicholson (1995; Gaski & Nevin (1985;Geyskens, Steenkamp, & Kumar (1999;Lusch (1976)

<sup>&</sup>lt;sup>13</sup> See Anicich, Fast, Halevy, & Galinsky (2015;Piazza & Castellucci (2014;Shipilov & Li (2008;Shipilov, Li, & Greve (2011

that reason, the findings of this research are useful for firms to better understand the effects of the social constructs and use this information in order to increase satisfaction of the suppliers and have a higher chance of becoming a preferred customer.

To achieve this, the next chapter will explain the relevant theoretical concepts. Next, the hypotheses are drafted and a conceptual model is created. This is followed by the methodology section, which gives a description of the case, explains the used method for finding the literature for the theoretical background, the way the data is collected and explains the statistical tests and procedures used to examine the conceptual model. Thereafter the results will be presented, this will be done in twofold. First, the effects on supplier satisfaction will be presented in incremental models. Thereafter, the results of the full model will be discussed. This is followed by a discussion and the implications of these findings. Finally, the limitations of this research and possibilities for future research are discussed. In addition to this thesis, also a paper has been written on this topic. This paper is added as appendix A.

# 2. Striving for a preferred customer status to gain preferential treatment of suppliers

## 2.1 The preferred customer status as a special kind of buyer-supplier relationship.

The management of the relationship between a buyer and its suppliers is key to the success of the supply chain<sup>14</sup> and thus impacts the performance of a firm.<sup>15</sup> This should be an incentive for buying firms to manage their relationships with their suppliers in the best way possible. One such way to optimise the relationship is to acquire a preferred customer status from the supplier, to consequently receive a preferential treatment by this supplier. This chapter will investigate the history of this concept and currently available literature on the preferred customer status. After the first part, the benefits and consequences of being a preferred customer will be elaborated. Finally, the antecedents and how to become a preferred customer are assessed.

A firm is a preferred customer of a supplier if that firm receives preferential resource allocation from the supplier. 16 This is not a new term, however it has not been used much in the field of purchasing. <sup>17</sup> The notion of becoming a preferred customer is reversed with respect to traditional marketing literature. <sup>18</sup> The traditional view was, and still is, that firms tried to become preferred suppliers of their customers, whereas the preferred customer concept advocates customers trying to become the preferred customer of their supplier. The first to publish research, albeit a PhD-dissertation, about preferential treatment by suppliers were Brokaw and Davisson in 1976. They did research on supplier preferences in the chemical industry. Fifteen years later, Williamson (1991) first suggested to implement a preferred customer relationship through the signing of contracts between the buyer and the seller to connect both parties for a long time. 20 However, he soon realised that this would not work, stating that "such a contract would quickly become unmanageable"<sup>21</sup> because of the huge number of contingencies possible. The solution lies in building a 'preferred customer relationship' and 'preferred supplier relationship' between both parties. This can be done by the buyer if they purchase the majority of the products at the same supplier. On the other hand, the supplier can allocate large amounts of

<sup>&</sup>lt;sup>14</sup> See Ambrose, Marshall, and Lynch (2010), p. 1269

<sup>&</sup>lt;sup>15</sup> See Tan, Kannan, Handfield, and Ghosh (1999), p. 1047

<sup>&</sup>lt;sup>16</sup> See Steinle and Schiele (2008), p. 11

<sup>&</sup>lt;sup>17</sup> See Hüttinger, Schiele, and Veldman (2012), p. 1194

<sup>&</sup>lt;sup>18</sup> See Schiele, Calvi, & Gibbert (2012) p. 1178

<sup>&</sup>lt;sup>19</sup> See Brokaw and Davisson (1976); Hüttinger et al. (2012), p. 1200

<sup>&</sup>lt;sup>20</sup> See Williamson (1991), p. 79

<sup>&</sup>lt;sup>21</sup> Williamson (1991), p. 80

production flexibility for supplying scarce products on short notice to its largest and most loyal customers.<sup>22</sup> These were the very first ideas about how to become a preferred customer. After Williamson, Moody (1992) identified ten characteristics of buyers that were used to describe a 'best customer' by suppliers.<sup>23</sup> She was the first to identify antecedents of the preferred customer, by using the results of a survey conducted by the Association for Manufacturing Excellence. Research on preferred customer status continued but it took numerous years before it really got the attention of scholars. In 2008, Steinle and Schiele researched the influence of preferred customer status on global sourcing and they reasoned that proximity between buyer and supplier has a positive influence on the relationship between the two.<sup>24</sup> The real breakthrough for the concept of preferred customer status came in late 2012, when the journal Industrial Marketing Management dedicated a special issue to it. The nine articles of this issue cover the subjects of customer attractiveness, supplier satisfaction and preferred customer status and gave the research on these concepts a boost. Five of these articles are explicitly about preferred customer status and elaborate on how to become a preferred customer<sup>25</sup>, the overarching framework between the three aforementioned concepts<sup>26</sup> and the effect of buyer behaviour on preferred customer status.<sup>27</sup> These articles form the new basis of the preferred customer concept, identifying not only antecedents, but also consequences. The following sections will first discuss the consequences of a preferred customer status, followed by the antecedents of the preferred customer status and a model on how to become one.

<sup>&</sup>lt;sup>22</sup> See Williamson (1991), p. 80

<sup>&</sup>lt;sup>23</sup> See Moody (1992), p. 52

<sup>&</sup>lt;sup>24</sup> See Steinle and Schiele (2008), p. 11

<sup>&</sup>lt;sup>25</sup> See Nollet, Rebolledo, & Popel (2012); Baxter (2012)

<sup>&</sup>lt;sup>26</sup> See Schiele, Calvi, et al. (2012); Hüttinger et al. (2012)

<sup>&</sup>lt;sup>27</sup> See Ellis, Henke, and Kull (2012)

## 2.2 Benefits of a preferred customer status: preferential resource allocation and economic benefits

The definition by Steinle and Schiele (2008) named earlier already reveals the benefits of being a preferred customer. The customer that is awarded a preferred status receives preferential resource allocation from the supplier. There is a general division between gradations of preferred customers, as shown in figure 1. Non-preferred customers are the normal customers and they receive no extra benefits for their money. Medium preferred customers receive some benefit, either in the form of exclusive products or for example delivery conditions. These customers do have to pay for the benefits however. The top preferred customers receive the most benefits and do not have to pay extra to receive these benefits. These customers are the most preferred customers of the supplier. This implies that the top preferred customer receives better treatment compared to its competitors that source from the same supplier.

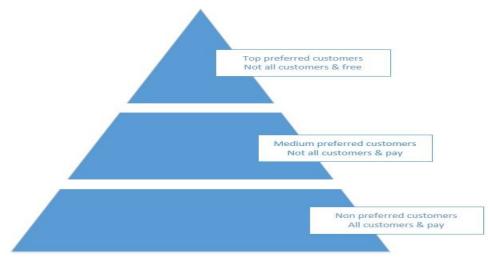


Figure 1. Preferred customer pyramid

Receiving better treatment than competitors means by definition that it leads to an advantage when competing with other customers over a scarce or valuable resource.<sup>28</sup> Better treatment can also come in the form of higher product quality and availability, lower prices, faster delivery or support in the sourcing process.<sup>29</sup> Other types of preferential treatment are for example suppliers that respond first to the needs of their preferred customers whereas non-preferred customers have to wait<sup>30</sup>, the dedication of the supplier's best personnel to the relationship with the preferred customer or the sharing of new ideas

<sup>&</sup>lt;sup>28</sup> See Steinle and Schiele (2008), p. 11

<sup>&</sup>lt;sup>29</sup> See Nollet et al. (2012) p. 1186

<sup>&</sup>lt;sup>30</sup> See Williamson (1991), p. 83

and/or innovations with preferred customers before sharing them with non-preferred customers.<sup>31</sup> Priority of delivery in times of resource scarcity is one of the most important types of preferential treatment. Preferred customers can profit from their status in case of capacity bottlenecks when a supplier has to choose to which customer he allocates his remaining production capacity. This situation can occur when for example a base resource is scarce, but also when the supplier is hit by a natural disaster like a tsunami or earthquake and they have to decide which customer to allocate the remaining products or production capacity to.<sup>32</sup> Next to resource allocation benefits, a preferred customer status can also lead to lower prices for the customer. This was first shown by Bew in 2007, with savings found of 2 to 4 percent.<sup>33</sup> In 2011, Schiele et al. showed a significant positive relationship between being a preferred customer and receiving benevolent pricing of the supplier. They found this result through a survey with 166 sample cases.<sup>34</sup> The following section describes the antecedents of the preferred customer status and how a firm can become a preferred customer.

## 2.3 Customer attractiveness and supplier satisfaction as antecedents for preferred customer status

Moody (1992) was the first to empirically identify ten characteristics of buyers that were used to describe a 'best customer' by suppliers and start the empirical quest for antecedents of preferred customer status.<sup>35</sup> Suppliers were asked to rank the importance of 24 characteristics in the relationship with their buyers. The following ten characteristics were rated as most important: early supplier involvement, mutual trust, involvement in product design, quality initiatives, profitability, schedule sharing, response to cost reduction ideas, communication and feedback, crisis management/response, and commitment to partnership.<sup>36</sup> Interesting about these characteristics is that seven out of ten are based on communication or other forms of interaction.<sup>37</sup> It was however not until 2012 that a good overview of antecedents became available through the work of Hüttinger et al. (2012). They provided an extensive literature review regarding the antecedents of not only preferred customer status, but also regarding customer attractiveness and supplier

<sup>31</sup> See Steinle and Schiele (2008), p. 11; Hüttinger et al. (2012), p. 1194; Pulles, Schiele, Veldman, and Hüttinger (2016), p. 136

<sup>&</sup>lt;sup>32</sup> See Pulles et al. (2016), p. 8

<sup>&</sup>lt;sup>33</sup> See Bew (2007), p. 2

<sup>&</sup>lt;sup>34</sup> See Schiele, Veldman, and Hüttinger (2011), p. 15

<sup>&</sup>lt;sup>35</sup> See Moody (1992), p. 52

<sup>&</sup>lt;sup>36</sup> See Moody (1992), p. 52

<sup>&</sup>lt;sup>37</sup> See Hüttinger et al. (2012), p. 1202

satisfaction.<sup>38</sup> According to them, these three constructs should be analysed in an integrative way. Customer attractiveness is necessary for the supplier to engage in a relationship. If this relationship meets its expectations, the supplier is satisfied. If this satisfaction is higher with certain customers compared to other customers, there is a possibility for a preferential treatment for these customers.<sup>39</sup> Hüttinger et al. (2012) divided all antecedents, or 'drivers', of preferred customer status in four categories: economic value, relational quality, instruments of interaction and strategic compatibility. See table 1 for a summary of all the antecedents they found in available literature and the division in categories.

Table 1. Antecedents of preferred customer status adapted from Hüttinger et al. (2012)

Economic Value	Rolational Quality	Instruments of interaction	Ctratagic compatibility
Economic value	Relational Quality	mstruments of interaction	Strategic compatibility
High purchase volumes	Loyalty	Early supplier involvement Involvement in product	Strategic fit
Profitability	Trust	design	Shared future
Business opportunities Total cost as basis for	Commitment	Supplier development Response to cost reduction	Cluster membership
purchasing price Low cost to serve the	Satisfaction	ideas	Geographical proximity
customer	Customer attentiveness	Communication and feedback	
	Respect	Quality initiatives	
	Fairness	Schedule sharing	
		Action-oriented crisis	
	Strong bonds	management	
		Simple and coordinated	
		business procedures	
		Predictable decision	
		processes	

One of the most important antecedents of preferred customer status is the satisfaction of the supplier. 40 Schiele et al. (2012) state that a customer is awarded a preferential treatment if "this customer is perceived as attractive and if the supplier is currently more satisfied with this customer than with alternative customers."41 This again shows the importance of the interaction between customer attractiveness, supplier satisfaction and preferred customer status. According to Ellis et al. (2012), two particular characteristics have a positive effect on the buyer's preferred customer status: supplier involvement and

 <sup>&</sup>lt;sup>38</sup> See Hüttinger et al. (2012), pp. 1199, 1201, 1202
 <sup>39</sup> See Hüttinger et al. (2012), pp. 1194, 1195; Schiele, Calvi, et al. (2012) p. 1180
 <sup>40</sup> See Schiele, Calvi, et al. (2012) p. 1181
 <sup>41</sup> Schiele, Calvi, et al. (2012) p. 1181

relational reliability. Involving suppliers is a decision of the buyer to involve the supplier early in the development of new products. Relational reliability reflects the fulfilment of promises the buyer has made to the supplier. The higher the relational reliability, the more it reduces risks for future exchanges with the buyer. 42 One of the most influential theories in the research on preferred customer status is the social exchange theory (SET). SET focuses on the reciprocity in an exchange relationship, meaning that "people cooperate under the expectation that they will give and receive from the relationship."<sup>43</sup> When suppliers are satisfied with their relationship with the customer, it is expected that this customer receives something in exchange for this satisfaction. 44 Preferential treatment as a consequence of a preferred customer status can then be seen as a reward for delivering satisfaction to the supplier.

Nollet et al. (2012) developed a four-step model describing how to become a preferred customer using specific tactics that help the customer to get and keep a preferential status. They base their model on social exchange theory. SET, in a business context, assumes that exchanges involve social and/or economic results and that these results are compared to the results with alternative exchange partners. The first step in their model is the initial attraction of the supplier's attention. The supplier has to be aware the potential client exists and the potential client needs to have certain attractiveness factors. Among the most important factors are: the client's market share, growth and influence on the market. The higher the expected value of these factors, the higher the chance that the supplier will accept an initial exchange. In the first step it is imperative that the client presents itself as a valuable partner. 45 The second of four steps to become a preferred customer deals with performance. After the initial exchange, the client has to satisfy the expectations of the supplier that are raised. This step encompasses the creation of supplier satisfaction, one of the necessary antecedents for a preferred customer status. The goal of creating a satisfied supplier is to ensure the supplier will see the advantages of continuing to deal with the client. For the next step, the client has to make the supplier perceive him as contributing more and performing better than alternative customers, in order to make the supplier invest more in their relationship. To become a preferred customer, the client continually needs to exceed the expectations of the supplier and make sure he outperforms available

<sup>&</sup>lt;sup>42</sup> See Ellis et al. (2012), p. 1265

<sup>&</sup>lt;sup>43</sup> Nyaga et al. (2010), p. 102

<sup>44</sup> See Vos et al. (2016), pp. 4614-4615

<sup>45</sup> See Nollet et al. (2012) p. 1188

alternatives. 46 Since the customers of a supplier are constantly being evaluated, step four deals with the sustainability of the relationship with the supplier. As a preferred customer, one needs to keep assessing the supplier's needs and improve the value proposition to maintain the preferred customer status.<sup>47</sup> The research stream started by Hüttinger et al. (2014) explores the antecedents of customer attractiveness, supplier satisfaction and preferred customer status. Their research explores the influence of eight antecedents that were found through a qualitative study among a sample of buyers of the focal firm. After this, they tested these antecedents through a survey among key account managers of the focal firm's suppliers.<sup>48</sup> They found that growth opportunity and, like Ellis et al. (2012), reliability were significant influences on awarding preferred customer status. Vos et al. (2016) then used both the data of Hüttinger et al. (2014) and data gathered by themselves with a chemical concern to integrate the earlier model in to a single model that differentiates between direct and indirect purchases. They showed that supplier satisfaction influences preferred customer status, and that preferred customer status influences preferential treatment. 49 The research done in this thesis will follow this stream of research and will build upon it. The next chapter will further explore the concept of supplier satisfaction, a necessary condition of becoming a preferred customer.

#### 3. Supplier satisfaction, a necessary condition for preferred customer status

# 3.1 Supplier satisfaction, when the outcome of the relationship meets the expectations of the supplier

Suppliers can help a firm achieve competitive advantage by providing resources like raw materials and semi-finished products, but suppliers can also provide ideas, knowledge and capabilities which a firm can not get elsewhere.<sup>50</sup> Obviously it is possible that competitors try to get the same resources from the same supplier.<sup>51</sup> So it is not as easy to get a competitive advantage from your supplier. Because of this, it is important that a firm is capable of getting better resources from their suppliers than their rivals in order to get competitive advantages.<sup>52</sup> The fact that some buyers get better resources than their

<sup>&</sup>lt;sup>46</sup> See Nollet et al. (2012) p. 1190

<sup>&</sup>lt;sup>47</sup> See Nollet et al. (2012) p. 1191

<sup>&</sup>lt;sup>48</sup> See Hüttinger et al. (2014), p. 697

<sup>&</sup>lt;sup>49</sup> See Vos et al. (2016), p. 4618

<sup>&</sup>lt;sup>50</sup> See Koufteros, Vickery, and Dröge (2012), p. 96

<sup>&</sup>lt;sup>51</sup> See Takeishi (2002), p. 323

<sup>&</sup>lt;sup>52</sup> See Hunt and Davis (2008), pp. 16-19

competitors means that the allocation of resources to buying firms is a selective process.<sup>53</sup> As already stated in the introduction, supplier satisfaction plays a role in the process of resource allocation: an unsatisfied supplier will probably not do the best it can to help the buying company and may supply raw materials or products of less quality, what leads to a lower quality of a buyer's products. This of course has a negative influence on the sales volumes and profitability of the buyer, so it is important to have a satisfied supplier.<sup>54</sup> This not only makes clear the importance of supplier satisfaction, it also demonstrates that a company must be aware of the level of satisfaction of its own suppliers. This chapter will investigate the history of supplier satisfaction and the definition will be explored. After this part, the development of the empirical base will be discussed as well as the already known antecedents of supplier satisfaction. Next, the state of the art of the concept will be discussed. Finally, the benefits of supplier satisfaction are assessed.

Schiele et al. (2011) stated the following about the research to supplier satisfaction: "Customer satisfaction has been recognised as a relevant concept of business success. Despite its apparent significance, supplier satisfaction has been widely neglected and remained largely unexplored."<sup>55</sup> This indicates that the importance of the concept is clear, but there is not done a lot of research to the concept. <sup>56</sup> The main reason for this is that the relationship between buyers and suppliers was commonly seen from the perspective of the suppliers, since they had to satisfy the customers as much as possible to keep them their customer. It has only been recently that there is more and more attention for another perspective, the buyers need to satisfy the suppliers in order to get the best resources from them. <sup>57</sup> This idea of 'reverse-marketing' dates back to 1988<sup>58</sup>, but only recently supplier satisfaction has gained more attention in the supply chain management literature. <sup>59</sup> Supplier satisfaction itself was first mentioned in the nineties, but since the early 2000s several scholars have done research into this concept. Wong was in 2000 one of the first who did research into supplier satisfaction. His study was conceptual in nature, claiming that working together with suppliers will improve both supplier satisfaction and customer

\_

<sup>&</sup>lt;sup>53</sup> See Pulles et al. (2016), p. 129

<sup>&</sup>lt;sup>54</sup> See Snyder (2003), cited by Meena and Sarmah (2012), p. 1236; Essig and Amann (2009), p. 104

<sup>&</sup>lt;sup>55</sup> Schiele et al. (2011), p. 12

<sup>&</sup>lt;sup>56</sup> See Benton and Maloni (2005), p. 2

<sup>&</sup>lt;sup>57</sup> See Schiele, Calvi, et al. (2012), p. 1178

<sup>&</sup>lt;sup>58</sup> See Leenders and Blenkhorn (1988), p. 2

<sup>&</sup>lt;sup>59</sup> See Schiele, Ellis, Eßig, Henke, and Kull (2015), p. 133

satisfaction.<sup>60</sup> In this year also the first empirical research into supplier satisfaction was done. Forker and Stannack (2000) tested the different effects of competitive and cooperative relationships on the level of satisfaction of both the buyers and the suppliers.<sup>61</sup> During the rest of this decade, the basis of the concept of supplier satisfaction developed into how it is known nowadays.

However, the development of the concept led to different ways of defining it. For example, Essig and Amann (2009) define supplier satisfaction as follow: "Supplier satisfaction: a supplier's feeling of fairness with regard to buyer's incentives and supplier's contributions within an industrial buyer-seller relationship as relates to the supplier's need fulfilment, such as the possibility of increased earnings or the realisation of cross-selling." Another definition was given by Schiele et al. (2012): "supplier satisfaction is a condition that is achieved if the quality of outcomes from a buyer-supplier relationship meets or exceeds the supplier's expectations." This definition combines previous definitions with the social exchange perspective, what makes this the most complete definition of supplier satisfaction.

This definition is in line with the Social Exchange Theory (SET), which also can be used to define supplier satisfaction. The roots of satisfaction can namely be found in that theory. Before two parties engage in a relationship with each other, they have to assess the attractiveness of the other party. This is based on the expectations the parties have of the value of a relationship with each other. When the expected value of a relationship is above a certain level, the other party will be seen as attractive. This is considered by many scholars in the marketing literature as a necessary condition of starting a relationship. <sup>64</sup> These expectations can be seen as the result of the rewards that are expected minus the costs of being involved in a relationship. Following the reasoning of social exchange theory, the expectations of the relationship are relevant for suppliers when it comes to evaluating customer relationships. Supplier satisfaction is the result of the comparison between the expectations of a relationship with a buyer and the delivered outcome of this relationship. That means that supplier satisfaction is the degree to which expectations are met or even exceeded.

\_

<sup>&</sup>lt;sup>60</sup> See Wong (2000), p. 427

<sup>&</sup>lt;sup>61</sup> See Forker and Stannack (2000), p. 31

<sup>62</sup> Essig and Amann (2009), p. 104

<sup>&</sup>lt;sup>63</sup> Schiele, Calvi, et al. (2012), p. 1181

<sup>&</sup>lt;sup>64</sup> See Schiele, Veldman, Hüttinger, and Pulles (2012), p. 140

So satisfaction is the result of the comparison between the expectations and the actual outcome of a relationship. According to the meta-analytical study of Geyskens et al. (1999) satisfaction is a multidimensional construct. It consist of an economic part and a noneconomic or social part. 65 In line with this finding, Gassenheimer and Ramsey (1994) studied the satisfaction between two channel members including both economic findings and the social interaction in their operationalisation of the construct. <sup>66</sup> Also other scholars saw that satisfaction is not a unitary construct and highlighted two dimensions of this concept; namely economic and social satisfaction.<sup>67</sup> This is also the case according the social exchange theory, the exchange between two parties can be divided into social and economic exchange and so can satisfaction in exchange relationships. <sup>68</sup> Thus satisfaction consists of two parts, an economic and a social part, and both parts together constitute the actual satisfaction with the relationship.

The economic part of satisfaction refers to the evaluation of the economic outcomes that flow from the relationship with the partner firm relative to the firm's expectations concerning the financial aspects of the relationship. Examples of terms that belong to these economic outcomes are general effectiveness and productivity, sales volume, margins, profits and other financial outcomes. An economically satisfied firm considers the relationship to be a success with respect to goal achievement.<sup>69</sup>

The social part of satisfaction is about the evaluation of the psychosocial aspects of a relationship, in which degree the interaction with the exchange partner is fulfilling, easy and smooth. 70 When a firm is satisfied with the social outcomes of the exchange relationship, it appreciates the contact with its partner and likes to work with this partner, because it considers the partner as concerned, respectful, and willing to exchange ideas.<sup>71</sup> This dimension focuses on other aspects of subjective character such as social contact, communication or shared values.<sup>72</sup> But both dimensions of satisfaction are still the result of the comparison of the expectations and outcome of the relationship.

See Geyskens et al. (1999), p. 223
 See Gassenheimer and Ramsey (1994), p. 261

<sup>&</sup>lt;sup>67</sup> See Mohd Noor, Perumal, and Goaill (2015), pp. 128-129

<sup>&</sup>lt;sup>68</sup> See Low, Lee, and Cheng (2013), p. 2

<sup>&</sup>lt;sup>69</sup> See Geyskens and Steenkamp (2000), p. 13

<sup>&</sup>lt;sup>70</sup> See Geyskens and Steenkamp (2000), p. 13

<sup>&</sup>lt;sup>71</sup> See Geyskens et al. (1999), p. 224

<sup>&</sup>lt;sup>72</sup> See del Bosque Rodríguez, Agudo, and Gutiérrez (2006), p. 667

# 3.2 The findings of supplier satisfaction in 2000-2010, the development of the empirical base of the concept

In the first decade of this century, scholars started to explore the concept of supplier satisfaction. In this period, the first empirically studies into this area are conducted. By this, the empirical base of supplier satisfaction was developed. This chapter will describe the studies on supplier satisfaction conducted in this period. Table 2 will provide an overview of these studies and their findings.

Table 2. Overview of the studies to supplier satisfaction and their findings (2000-2010)

Authors	Focus (possible antecedents of supplier satisfaction)	Method	Findings
Wong (2000)	Cooperative culture, commitment to suppliers' satisfaction, constructive controversy	Conceptual	This article argued that companies need to develop a co- operative culture of working together with their suppliers, commit to satisfying their suppliers' needs and adopt an open-minded attitude in their interactions with their suppliers in order to satisfy the suppliers.
Forker and Stannack (2000)	Cooperative relationships	Survey	The level of supplier satisfaction is higher in cooperative relationships than in competitive relationships.
Whipple et al. (2002)	The level of information exchange, accuracy of information exchange, timeliness of information exchange	Survey	An increase in the amount of operational information exchanged is found to have a positive impact on the overall level of satisfaction.
Mauna (2003)	Profitability, agreements, early supplier involvement, business continuity, forecasting/planning, roles and responsibilities, openness and trust, feedback and the buying company's values.	Conceptual	Based on the nine dimensions named in the column 'focus', Mauna developed a questionnaire that is useful for buying companies to measure and improve supplier satisfaction.
Benton and Maloni (2005)	Coercive-mediated power sources, reward mediated power sources, non-mediated power sources, performance	Survey	Coercive-mediated power sources were found to negatively impact supplier satisfaction, while reward mediated power sourcesa and non-mediated power sources have a positive effect on satisfaction. There was not found a relationship between performance and supplier satisfaction.
Leenders et al. (2006)	Granting substantial volumes, long-term commitments, and exclusivity agreements 2. Sharing internal information and extensive communication 3. Exhibit a willingness to change behaviour in the purchasing organisation 4. Respond rapidly to requests from suppliers	Conceptual	They argued buyers can improve the level of satisfaction of their suppliers by the four marketing and supply management tools named in the column 'focus'.
Essig and Amann (2009)	Intensity of cooperation, order process, billing/delivery, communications, conflict management, general view	Survey	They operationalised supplier satisfaction through an index consisting of three dimensions: the strategic level, the operational level and the accompanying level.
Nyaga et al. (2010)	Collaborative activities, trust, commitment	Survey	They found that the collaborative activities information sharing, joint relationship effort, and dedicated investments have a positive impact on supplier satisfaction which is mediated by trust and commitment.
Ghijsen et al. (2010)	Indirect influence strategies, direct influence strategies, direct supplier development activities, dependence	Survey	They found that the use of promises and both human- and capital-specific supplier development positively impact supplier commitment, while indirect influence strategies, the other direct influence strategies and capital-specific supplier development have a positive effect on supplier satisfaction. On the other hand, requests, threats and legalistic pleas were found to have a negative impact on supplier satisfaction.

As already stated, Wong (2000) was one of the first who did research on supplier satisfaction. He argued that a relational and cooperative approach towards suppliers will lead to a higher level of supplier satisfaction with the relationship. But his research was conceptual, he did not test this empirically.<sup>73</sup> Forker and Stannack were in 2000 the first who empirically tested possible antecedents of supplier satisfaction. They compared the

-

<sup>&</sup>lt;sup>73</sup> See Wong (2000), p. 427

effects of competitive and cooperative exchange relationships on the level of satisfaction of buyers and suppliers. They found that the level of satisfaction is higher in a cooperative relationship compared to a competitive relationship, what corresponds to the assumption of Wong (2000).<sup>74</sup>

Whipple et al. (2002) tested in their research the effect of information-sharing between trading partners on the overall satisfaction of both parties. They found that an increase in the amount of operational information exchanged has a positive impact on the overall level of satisfaction in the relationship.<sup>75</sup>

Maunu (2003) developed in her study a conceptual framework consisting of nine supplier satisfaction dimensions, divided in two groups: business-related dimensions and communication-related dimensions. The business-related supplier satisfaction dimensions are concrete, fact-based values. The dimensions which belong to this group are profitability, agreements, early supplier involvement, business continuity forecasting/planning. On the other hand, communication-related dimensions are softer, human-based values. These values consist of roles and responsibilities, openness and trust, feedback and the buying company's values. <sup>76</sup> Based on these nine dimensions, Maunu (2003) developed a questionnaire that enables the buying firm to measure supplier satisfaction and which can be used to improve its processes with suppliers and external partners.<sup>77</sup>

Benton and Maloni (2005) empirically tested the impact of different forms of power and performance on supplier satisfaction. The researchers included coercive-mediated power sources, reward-mediated power sources and non-mediated power sources in their research. Coercive-mediated power sources were found to negatively impact supplier satisfaction, the other two sources had a positive effect on satisfaction. They did not found evidence that performance has a positive effect on the level of satisfaction.<sup>78</sup>

Leenders et al. (2006) explained the current buyer-supplier relationship in terms of satisfaction and stability by providing a framework named 'The Purchaser-Supplier Satisfaction Matrix' in their book. They stated that buyers can improve the level of

<sup>&</sup>lt;sup>74</sup> See Forker and Stannack (2000), p. 31

<sup>&</sup>lt;sup>75</sup> See Whipple, Frankel, and Daugherty (2002), p. 67 p.75, cited by Hüttinger et al. (2012), p. 1199
<sup>76</sup> See Maunu (2003), pp. 91-98

<sup>&</sup>lt;sup>77</sup> See Maunu (2003), pp. 62-90

<sup>&</sup>lt;sup>78</sup> See Benton and Maloni (2005), p. 1

satisfaction of their suppliers by the following four marketing and supply management tools:

- 1. Granting substantial volumes, long-term commitments, and exclusivity agreements.
- 2. Sharing internal information and extensive communication.
- 3. Exhibit a willingness to change behaviour in the purchasing organisation.
- 4. Respond rapidly to requests from suppliers.

This has also been a conceptual study, they did not test the effects of these tools on satisfaction empirically. 79

Supplier satisfaction was explored by Essig and Amann (2009) as a factor of buyersupplier relationship quality. To operationalise supplier satisfaction, they used an index that contains 36 indicators that are subsumed to three dimensions and six indicator groups. The first dimension refers to the strategic level of a relationship and contains indicators that allow for conclusions about the intensity of cooperation. The second dimension is the operational level, which contains the order process and billing/delivery as indicators. The accompanying level is the third dimension. Communication, conflict management and the general view of the relationship are the indicators of this dimension.<sup>80</sup>

Nyaga et al. (2010) tested the effects of collaborative activities, such as dedicated investments, information sharing and joint effort, on satisfaction from the perspectives of both buyers and suppliers. They found that all three collaborative activities lead to commitment and trust, which leads to a higher level of satisfaction and better performance.81

Ghijsen et al. (2010) tested the effects of influence strategies and supplier development on the supplier commitment and satisfaction. The researchers made a distinction between indirect influence strategies (information exchange and recommendations) and direct influence strategies (requests, promises, threats and legalistic pleas). Also two dimensions of direct supplier development activities were taken into account, namely human-specific supplier development and capital-specific supplier development. They found that the use of promises and both human- and capital-specific supplier development positively impact supplier commitment, while indirect influence strategies, the other direct influence

<sup>&</sup>lt;sup>79</sup> See Leeders, Johnson, Flynn, and Fearon (2006); cited by Hüttinger et al. (2012), p. 1199

<sup>80</sup> See Essig and Amann (2009), pp. 105-107 81 See Nyaga et al. (2010), p. 101

strategies and capital-specific supplier development have a positive effect on supplier satisfaction. On the other hand, requests, threats and legalistic pleas were found to have a negative impact on supplier satisfaction.<sup>82</sup>

Hüttinger et al. provided in 2012 a good overview of the known antecedents of supplier satisfaction. They did an extensive literature review of the antecedents of supplier satisfaction and also of the drivers of customer attractiveness and preferred customer status. They found nine relevant articles covering antecedents of supplier satisfaction, these articles are discussed above. They noticed that the found antecedents of supplier satisfaction can be categorised into four groups, namely technical excellence, supply value, mode of interaction and operational excellence. 83 The 'technical excellence' group refers mainly to the technical aspects of the business and the R&D department is an important part of this. Antecedents in this group are for example: early supplier involvement, technical competence and supplier development. The group of 'supply value' antecedents refers to the way of value creation in the relationship and is mainly influenced by the purchasing department. The profitability, the bargaining position and also 'how cooperative the relationship is' are examples of antecedents in this category. The 'mode of interaction' group of antecedents is about the way of interaction between the companies and is driven by all functions of a business. Communication, the structure of the communication, the way of reacting on the other party and information sharing are in this group. The 'operational excellence' category of antecedents refers to the operational part of the buying firm that influences the interaction with the supplier and is the responsibility of the production/logistics areas (the production department). Forecasting and planning, the order process and payment habits are part of this group. So the mode of interaction is driven by all functions, the other three categories can be attributed to different functions of a company. Hüttinger et al. (2012) observed two major trends in the reviewed articles. The first trend they found is that scholars in the field of purchasing and supply management mainly tested the effect of different relationship strategies on supplier satisfaction. The conclusion of this is that suppliers, in contrast to buyers who are more focused on performances and the outcome of the relationship, find the atmosphere of the relationship and the development of norms more important. A buyer should take this in account, otherwise this difference could lead to dissatisfaction. The second trend they observed is

 <sup>82</sup> See Ghijsen, Semeijn, and Ernstson (2010), pp. 22-24
 83 See Hüttinger et al. (2012), pp. 1198-1200

that scholars in this field use marketing or supply chain management literature as a conceptual basis, for studying the impact of business and communication-related factors on supplier satisfaction.<sup>84</sup>

### 3.3 State of the art, the nine dimensions of supplier satisfaction

Recently, a new model of supplier satisfaction was introduced by Hüttinger et al. (2014). They tried to find other antecedents by using a mixed method approach. Based on the literature review of the antecedents and by using a world café method with buyers of an automotive original equipment manufacturer (OEM), they identified eight possible antecedents of supplier satisfaction. These possible antecedents were empirically tested by a quantitative survey. By doing so, they combined theory building with the testing of the theory. The eight possible antecedents they identified are growth opportunities, innovation potential, reliability, relational behaviour, operative excellence, support, contact accessibility and involvement. These possible antecedents were placed in a model with supplier satisfaction, preferred customer status and preferential treatment. The impact of these possible antecedents on supplier satisfaction in this model was analysed through a partial least squares (PLS) analyses. It was found that three of them have a significant effect, namely growth opportunity, reliability and relational behaviour.<sup>85</sup> The reason they give for this is that "[...] the results can hardly be generalised to all industry settings. [...] in other industries, other factors or weights could emerge". 86 Therefore, Vos et al. (2016) replicated the model of Hüttinger et al. (2014) to test it in another context. They made a distinction between direct and indirect procurement and also included one new possible antecedent, namely profitability. They found that growth opportunity, reliability and profitability have a significant impact on supplier satisfaction both when the procurement is indirect or direct. Operative excellence has only a significant effect on supplier satisfaction when the procurement is indirect, while the effect of relational behaviour is only significant when the purchasing is direct of nature.<sup>87</sup> At the end of their study, they improved this model (see figure 2). The idea of this model is that the innovation potential influences growth potential, support, reliability and involvement have an impact on relational behaviour and contact accessibility affects operative excellence. Growth opportunity, profitability, relational behaviour and operative excellence will influence

See Hüttinger et al. (2012), p. 1200 p.1200
 See Hüttinger et al. (2014), p. 697

<sup>86</sup> Hüttinger et al. (2014), p. 713 87 See Vos et al. (2016), pp. 4618-4622

supplier satisfaction, all these are categorised as relational aspects. Next, supplier satisfaction will have a positive impact on preferred customer status, which shows the intention of the supplier. And finally, preferred customer status will have a positive effect on preferential treatment, the actual behaviour of the supplier. This model could be the base for future research on supplier satisfaction.

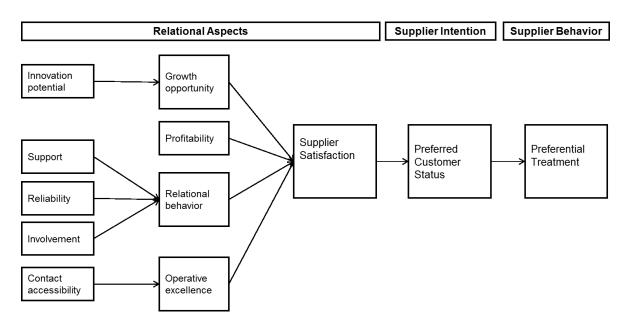


Figure 2. The improved model of Vos et al. (2016)

# 3.4 Ensuring the satisfaction of suppliers to gain additional benefits from the relationship

Purchasing became considered as a value-added capability to the firm. <sup>88</sup> Therefore suppliers are becoming partners to create value in a supply chain and the relationship with the suppliers is needed to be sustainable and long-lasting. <sup>89</sup> The value of the interaction with a supplier does not have to come immediately by low prices only, on the long-term a close cooperation between buyer and supplier can provide also value. It is only possible to have a long-lasting relationship with a supplier when the supplier is satisfied with the relation. <sup>90</sup> Besides that, supplier satisfaction is also directly linked to the quality of the relationship and value creation. <sup>91</sup>

As already stated, supplier satisfaction plays also a role in the process of resource allocation: an unsatisfied supplier will probably not do its utmost best it can to help the

19

<sup>&</sup>lt;sup>88</sup> See Carr and Pearson (1999), p. 498

<sup>89</sup> See Ulaga and Eggert (2006), pp. 119-120

<sup>90</sup> See Schiele, Calvi, et al. (2012), p. 1181

<sup>&</sup>lt;sup>91</sup> See Vos et al. (2016), p. 4613

buying company, resulting in for example supply of products of less quality. <sup>92</sup> Poor quality input for the buying firms will lower the quality of the buyer's products and thus influence the buyer' sales volumes and profitability. <sup>93</sup> Pulles et al. (2016) tested the relationship between supplier satisfaction and preferential resource allocation and found that supplier satisfaction has a positive direct effect on preferential resource allocation. <sup>94</sup> This means that if a buyer can not meet or exceed the expectations of the supplier about the relationship, then they probably will not get the best resources.

Besides this, supplier satisfaction can also lead to a preferred customer status. Schiele et al. (2012) state that a customer is awarded a preferential treatment if "this customer is perceived as attractive and if the supplier is currently more satisfied with this customer than with alternative customers." So when the level of satisfaction with a particular buyer is higher than the level of satisfaction with alternative buyers of a supplier, that buyer is granted with a preferred customer status at the supplier. Thereby it can receives a preferential treatment, so a better treatment than the other customers of the suppliers. The benefits of such a preferential treatment are for example receiving higher product quality and availability, lower prices, faster delivery and/or support in the sourcing process. The previous chapter has already described the benefits of having a preferred customer status in more detail.

## 4. Power, different ways of controlling

## 4.1 History of the concept power, a mechanism to control

According to Russell (1938), "power is a basic force in social relationships" and therefore plays a huge role in all kind of interactions. So it is not surprising that the concept of power has been researched by scholars in many diverse disciplines, including sociology, economics and management and organisational behaviour. The definition of power varies in the different research fields, but most definitions have the same base, namely that the power holder has the ability to influence or control the behaviour of those

<sup>&</sup>lt;sup>92</sup> See Meena and Sarmah (2012), p. 1236

<sup>93</sup> See Essig and Amann (2009), p. 104

<sup>&</sup>lt;sup>94</sup> See Pulles et al. (2016), p. 136

<sup>95</sup> See Schiele, Calvi, et al. (2012), p. 1181

<sup>&</sup>lt;sup>96</sup> See Nollet et al. (2012) p. 1186

<sup>&</sup>lt;sup>97</sup> Sturm & Antonakis (2015) p. 137

<sup>98</sup> See Fehr, Herz, & Wilkening (2013) p. 1325; Rucker & Galinsky (2008) p. 257-258

<sup>99</sup> See Shervani, Frazier, & Challagalla (2007) p. 639

with whom the power holder is in contact with.<sup>100</sup> So there are many different ways to define power and scholars have argued that it is difficult to give a comprehensive definition of the concept of power.<sup>101</sup> The various definitions of power are focused on different points, like the antecedents, units of analysis, outcome of interest, the actor's intentions and the response of the target.<sup>102</sup> Also the operationalisation of the concept of power varies, it has been "measured in terms of dependency, influence, resistance, and the modification of others' states".<sup>103</sup>

For instance, Weber (1947) defines power as the probability that a person can carry out his/her own will despite resistance. This is one of the first definitions of power and the starting point for most conceptualisations of this concept. The definition of Weber sees power as an ability of a person, "the ability to influence others and make them do things they would not do otherwise." On the other hand, Emerson (1962) defines it as a property of a social relation. "The power of actor A over actor B is the amount of resistance on the part of B that can be potentially overcome by A." Power is therefore the outcome of the extent to which actor B is dependent on the resources of actor A. That means that the more dependent B is on A, the more powerful A becomes. The carry out

According to Sturm and Antonakis (2015), "power is having the discretion and the means to asymmetrically enforce one's will over entities." Here the term 'entity' can refer to different levels of analysis namely the individual, group, organisational, cultural, and country levels. They explained that discretion refers to the available scope of action to power holders and the means through which this discretion works. 109 Sturm and Antonakis (2015) reviewed in their study different definitions of power (23 in total), based on the three essential characteristics of power: "Power is about having (a) discretion (agency) to act and (b) the means (innate, position) to (c) enforce one's will. That is, a powerful agent is one who can exogenously affect his or her environment or others at will." Almost all of the 23 definitions include the part of enforce will, about half of them include two

.

<sup>&</sup>lt;sup>100</sup> See Shervani et al. (2007) p. 639

<sup>101</sup> See Lukes (1986); cited by Keltner, Gruenfeld, & Anderson (2003) p. 265

<sup>&</sup>lt;sup>102</sup> See Keltner et al. (2003) p. 265

<sup>&</sup>lt;sup>103</sup> Sturm & Antonakis (2015) p. 138

<sup>&</sup>lt;sup>104</sup> See Weber (1947); cited by Sturm & Antonakis (2015) p. 139

<sup>&</sup>lt;sup>105</sup> Sturm & Antonakis (2015) p. 139

<sup>&</sup>lt;sup>106</sup> Emerson (1962) p. 132

<sup>&</sup>lt;sup>107</sup> See Sturm & Antonakis (2015) p. 139

<sup>&</sup>lt;sup>108</sup> Sturm & Antonakis (2015) p. 139

<sup>&</sup>lt;sup>109</sup> See Sturm & Antonakis (2015) p. 139

<sup>&</sup>lt;sup>110</sup>Sturm & Antonakis (2015) p. 139

characteristics and only three definitions do include all characteristics. See table 3 for the definitions and to which characteristics they comply.

Table 3. Definitions of power and their properties adapted from Sturm and Antonakis (2015)

			Defining property		
Source	Year Definition of power		on Means	Enforce will	
Weber	1947 Ability to carry out his or her own will	X		X	
Dahl 1957 Ability to compel others to do something				X	
French & Raven 1959 Ability to influence via different means			X	X	
Thibaut & Kelly 1959 Ability to control others' outcomes				X	
Cartwright	1959 Being able to influence others at will			X	
Mechanic	1962 A force that results in behavior			X	
Emerson	1962 Influencer is independent and target is dependent for resources	X	X	X	
Etzioni	1965 Holding preferences of followers in "abeyance"			X	
Siu	1979 Influencing beliefs, emotions, and behaviors of people			X	
McClelland 1975 Having impact on others or systems				X	
Dépret & Fiske 1993 Asymmetrical outcome control				X	
Fiol, O'Connor & Aguinis 2001 Power is the ability or potential to influence others				X	
Keltner, Gruenfeld & Anderson 2003 Modify others' states via resources and punishments			X	X	
Galinsky, Gruenfeld & Magee 2003 Control own and others' resources		X	X	X	
Van Dijk & Poppe 2006 A general striving for agency		X			
Sivanathan, Pillutla & Murnighan 2008 Control, modify, or influence others via rewards and punishments		X	X	X	
Magee & Galinsky 2008 Asymmetric control of resources in social relations			X	X	
Lammers, Stoker & Stapel 2009 Agency without influence by others		X			
Malhorta & Gino 2011 Control one's own and others' resources and outcomes		X	X	X	
Jordan, Sivanathan & Galinsky 2011 Asymmetric control over valued resources			X	X	
Goldstein & Hays 2011 Asymmetric control of valued resources, rewards, and punishments			X	X	
Rucker, Dubois & Galinsky 2011 Asymmetric control over other people or valued resources x			X	X	
Rucker, Galinsky & Dubois	2012 Perceived asymmetric control relative to others			X	

Building on this conceptualisations, power within the context of a buyer-supplier relationship can be defined as the ability of the buying firm to influence or control the decisions and behaviour of the supplying firm. 111 Therefore, power is seen as the mechanism of one firm to induce desired actions of another firm, which can be done in different ways. 112

#### 4.2 Power as a function of sources of power

Power is a broad concept, there are many ways to influence others. So power itself can be used in multiple ways. In science, there are several ways to classify the different sources of power. One of the most popular ways to classify power in different forms comes from the social psychologists French and Raven (1959), who identified five sources. Another popular way is to see the use of power as a mean to influence strategies or tactics. These approaches will be discussed below and compared with each other.

See Pulles, Veldman, Schiele, & Sierksma (2014) p. 18
See Maloni & Benton (2000); cited by Pulles et al. (2014) p. 18

The social psychologists French and Raven (1959) classified power into five different sources of power: expert, referent, coercive, legitimate and reward power. 113 A few years later Raven (1965) added a sixth source: informational power. 114 The first five are still the most commonly used sources of power, the sixth is sometimes used by others scholars and is not always included in research as a different source of power. Coercive power refers to the ability of the power holder to punish the target firm if this firm does not comply with the wishes of the power holder. 115 "Reward power depends on the ability of the power holder to provide benefits and to remove or decrease negative valence" if the target firm complies with the wishes of the power holder. 117 Expert power stems from the perception of the target firm that the power holder possesses some special knowledge or expertise that is valuable to the target firm. 118 The attractiveness of the power holder to the target firm is the basis of referent power. It implies that the target firm desires identification with the power holder for recognition by association and therefore can be influenced. 119 Legitimate power refers to the belief of the target firm that the power holder has the right to influence. 120 Further, some researchers split legitimate power into different forms of this kind of power, for example Brown and Frazier (1978) and Kasulis et al. (1979) did make a distinction between legal legitimate power (the judiciary right to influence 121) and traditional legitimate power (the natural right to influence 122). 123 The later added sixth source, informational power, can be seen as a distinct from expert power. 124 This kind of power arises when the power holder has knowledge that is useful in the relationship with the target firm (or information that the target firm needs), instead of special knowledge or expertise by expert power. Informational power can also arise when the power holder is able to interpret existing information in a way that is meaningful but not yet known by the target firm. 125 The above mentioned way is not the only way the concept of power is split into different forms. For example Frazier and Summers (1986) did use different influence

<sup>&</sup>lt;sup>113</sup> See French, Raven, & Cartwright (1959); found in Shafritz, Ott, & Jang (2015) p. 253

<sup>114</sup> See Raven (1965; cited by Raven (2008) p. 1

<sup>115</sup> See Terpend & Ashenbaum (2012) p. 54; Pulles et al. (2014) p. 20; Maloni & Benton (2000) p. 57; Kim, Pinkley, & Fragale (2005) p. 800

<sup>116</sup> French et al. (1959) p. 156; cited by Terpend & Ashenbaum (2012) p. 54

<sup>&</sup>lt;sup>117</sup> See Pulles et al. (2014) p. 20

<sup>&</sup>lt;sup>118</sup> See Maloni & Benton (2000) p. 57; Kim et al. (2005) p. 800

<sup>&</sup>lt;sup>119</sup> See Maloni & Benton (2000) p. 57; Kim et al. (2005) p. 800

<sup>&</sup>lt;sup>120</sup> See Maloni & Benton (2000) p. 57

<sup>&</sup>lt;sup>121</sup> See Maloni & Benton (2000) p. 59

<sup>&</sup>lt;sup>122</sup> See Maloni & Benton (2000) p. 59

<sup>123</sup> See Brown & Frazier (1978); Kasulis, Spekman, & Bagozzi (1979)

<sup>&</sup>lt;sup>124</sup> See Forsyth (2009) p. 227

<sup>&</sup>lt;sup>125</sup> See Lee (2001) p. 3

strategies as forms of power, namely information exchange, recommendation, promises, threats and requests. But these influence strategies are pretty much the same as the five traditional power sources of French and Raven, each influence strategy corresponds with a power source. Kipnis et al. (1980) explore the tactics commonly used by managers to influence others. Kipnis and Schmidt (1983) and Yukl and Tracey (1992) built on this study and together, these researchers identified nine dimensions of influence tactics: pressure, legitimation, exchange, coalition, ingratiation, rational persuasion, inspirational appeal, consultation and personal appeal. These dimensions of influence are more focused on the interpersonal relationships. The traditional five power sources of French and Raven (or the influence strategies of Frazier and Summers) are better suitable studying inter-organisational relationship. For that reason the power sources of French and Raven will be used in this research.

#### 4.3 Classification of the sources of power into dichotomous groups

Based on the classification of French and Raven (1959), several dichotomous groups of these power sources were made based on the nature of the different forms of power. Table 4 gives an overview of these groups. Hunt and Nevin (1974) were the first to do this: they made a distinction between coercive and non-coercive power. The grouping was easy, punishment power (which can be considered as similar to the coercive power source of French and Raven) was a form of coercive power, the other four sources of power were non-coercive. 129 Other scholars saw quickly that this way of grouping is not the best way. For instance, Etgar (1978) distinguished the sources of power based on the financial impact they have. He identified reward and punishment power (similar to coercive power) as sources of economic power, because these two bases of power have an financial impact (on the target's party). Expert, legitimate and referent power are identified as non-economic power, because they are not financial in nature. 130 Kasulis et al. (1979) made a distinction between direct (reward, punishment (coercive) and legal legitimate power) and indirect power (information, traditional legitimate and referent power). The reason for this distinction is that coercive, reward and legal legitimate power use direct outcome control to influence others, whereas the other sources of power use indirect outcome control. 131 In

-

<sup>&</sup>lt;sup>126</sup> See Frazier & Summers (1986) p. 172

<sup>&</sup>lt;sup>127</sup> See Kipnis, Schmidt, & Wilkinson (1980)

<sup>&</sup>lt;sup>128</sup> See Kipnis et al. (1980); Kipnis & Schmidt (1983); Yukl & Tracey (1992)

<sup>&</sup>lt;sup>129</sup> See Hunt & Nevin (1974) p. 187

<sup>&</sup>lt;sup>130</sup> See Etgar (1978) p. 54

<sup>&</sup>lt;sup>131</sup> See Kasulis et al. (1979)

1995, Brown, Lusch and Nicholson used the same grouping, but they named the groups non-mediated and mediated power. Non-mediated power sources are more relational and positive than mediated power. Non-mediated power is not expressed by the firm having the power, but the target firm decides whether and how it will be influenced by it. So it is possible that the firm with the power is not aware that these non-mediated sources of power are used or even exist. The mediated power sources are really used by the power holder. Using mediated sources of power, a firm intentional controls the reinforcements in order to influence its partner.

Table 4. Overview of the classification of the power sources into dichotomous groups

Authors	Dichotomous groups	Sources of power
Hunt & Navin (1074)	Coercive power	Punishment
Hunt & Nevin (1974)	2. Noncoercive power	Reward; Expertise; Legitimate; Referent
Etaar (1079)	1. Economic power	Reward; Punishment
Etgar (1978)	2. Noneconomic power	Expert; Legitimate; Referent
Brown & Frazier (1978)	<ol> <li>Weighted power</li> </ol>	Reward; Punishment; Legal legitimate
Diowii & Flazici (1976)	2. Unweighted power	Expert; Traditional legitimate; Referent
Kasulis et al. (1779)	<ol> <li>Direct power</li> </ol>	Reward; Punishment; Legal legitimate
Kasulis et al. (1779)	<ol><li>Undirect power</li></ol>	Information; Traditional legitimate; Referent
John (1984)	<ol> <li>Contingent power</li> </ol>	Reward; Punishment
JUIII (1984)	2. Noncontingent power	Expert; Legitimate; Referent
Frazier & Summers (19984)	1. Perceptions altered	Information exchange (information); Recommendation (expertise)
riaziei & Suillineis (19964)	2. Perceptions unaltered	Promises (reward); Threats (coercive); Legalistic (legal legitimate); Request (referent)
Droven et al. (1005)	<ol> <li>Mediated power</li> </ol>	Reward; Punishment; Legal legitimate
Brown et al. (1995)	2. Non-mediated power	Information; Traditional legitimate; Referent

Looking at table 4, it can be concluded that most scholars made a distinction between reward, coercive and legal legitimate power on one side and expert, referent and traditional legitimate power on the other side. In general, the dichotomies of power sources can be named as aggressive (reward, coercive and legal legitimate power) and nonaggressive power. The aggressive power focuses on the use of economic resources of the power holder and on using this as a direct economic incentive (either positive or negative) on the target firm. The nonaggressive power can have economically effects indirectly and on the long-term, but is focused on developing the relational environment. Another difference between these two forms of power is that aggressive power is really used by the power holder based on whether or not the target firm complies with its wishes and the used reinforcements are external to the target firm, while on the other hand the target firm

<sup>&</sup>lt;sup>132</sup> See Brown et al. (1995) p. 365

<sup>&</sup>lt;sup>133</sup> See Benton & Maloni (2005) p. 4

<sup>&</sup>lt;sup>134</sup> See Zhao, Huo, Flynn, & Yeung (2008) p. 370

<sup>&</sup>lt;sup>135</sup> See Maloni & Benton (2000) p. 57; Terpend & Ashenbaum (2012) p. 53

<sup>&</sup>lt;sup>136</sup> See Johnson, Sakano, Cote, & Onzo (1993) p. 2

<sup>&</sup>lt;sup>137</sup> See Lee (2001) p. 150

<sup>&</sup>lt;sup>138</sup> See Lee (2001) p. 151

decides whether and how it will be influence by the nonaggressive power sources. Since nonaggressive power sources (expert, traditional legitimate and referent power) are not used by an actor, these sources of power are excluded from this research. The most widely recognised sources of aggressive power are coercive and reward power. These two sources will be the focus of this study.

## 5. Conflict, the perception of differences of interest

#### 5.1 Conflict, disagreements due striving to achieve own goals

According to Thompson (1998), "conflict is the perception of differences of interests among people". 139 Conflicts can appear when two or more social entities (i.e., individuals, groups, organisations and nations) have contact with each other in order to achieve their own objectives. Due to using the relationship with another party to only reach their own objective, the relationship may become incompatible. This happens when two or more parties need a similar resource which is scarce, when they have preferences regarding their joint action that (partially) exclusive the wishes of the other party or when they have different attitudes, values, beliefs, and skills. 140

Conflict has been studied by scholars from different disciplines, like philosophy, sociology, economics, political science, anthropology, and psychology. 141 Conflicts can occur in any kind of social interaction and even an individual can experience a conflict with itself. So there are intra-personal conflicts, inter-personal, intra-group, intraorganisation/inter-group, inter-organisational and international conflicts and each level has its own primary research field. 142 Most of the early contributions to the study of social conflict came from philosophers and sociologists. In recent years, management scholars became interested in the study of social conflict. 143 Each discipline sees the term conflict slightly different. The basic view of sociologists is that conflict is a function of social structure and tends to harm the way society evolves. 144 For instance, the classical sociologist Georg Simmel (1908) hypothesised that "a certain amount of conflict is as

 $<sup>^{139}</sup>$  Thompson & Thompson (1998) p. 4

<sup>&</sup>lt;sup>140</sup> See Rahim (2001) p. 1

<sup>141</sup> See Bennett & Neiland (2002) p. 1; Rahim (2001) p. 1 142 See Blazejewski & Becker-Ritterspach (2011) p. 2

<sup>&</sup>lt;sup>143</sup> See Rahim (2001) p. 2

<sup>&</sup>lt;sup>144</sup> See Bennett & Neiland (2002) p. 1

essential to the proper functioning of groups, as are stability and order". Helton Mayo sees conflict as evil which should be minimalised or, even better, eliminated. Conflict is the outcome of power relations according to the political science. Marxist and Gramscian see class struggle as the main cause of conflicts. On the other hand, economists view conflict as the result of rational decision making by an individual trying to maximise its own utility given that resources are scarce. Thus, conflict is not only a complex topic, the wide variety of views on the subject from a wide range of disciplines further complicates the picture even more. As a result of the many different views on conflict, there is not a generally accepted definition. Rahim (2001) stated that: "the term 'conflict' does not have a single clear meaning."

Pondy (1967) observed that the early used definitions of conflict are focusing on different parts of conflict. Some definitions describe the antecedent condition of conflicts, like scarcity of resources or policy differences. Other definitions are focusing on the affective or cognitive state of the individuals involved. Examples of the described affective state of individuals in a conflict are stress and tension, while the perception or awareness of the conflict situation are examples of the cognitive state. Last, definitions of conflict can also focus on the behaviour during a conflict, ranging from resistance to overt aggression. <sup>152</sup> Fink (1968) observed the same in his classic review, there is a high variance in conflict definitions. There are a lot of definitions for specific areas and some broad definitions that try to capture the whole concept. <sup>153</sup> An example of a very specific definition of conflict comes from March and Simon (1958). They define conflict as a "breakdown in the standard mechanisms of decision making, so that an individual or group experiences difficulty in selecting an alternative." <sup>154</sup> This is a narrow conceptualisation of conflict and is only useful in some organisational research. <sup>155</sup> Pondy (1967) uses a much broader definition for conflict, he sees organisational conflict as a dynamic process caused by

<sup>&</sup>lt;sup>145</sup> Simmel (1908) pp. 17-18); cited by Rahim (2001) p. 5

<sup>&</sup>lt;sup>146</sup> See Rahim (2001) p. 5

<sup>&</sup>lt;sup>147</sup> See Bennett & Neiland (2002) p. 1

<sup>&</sup>lt;sup>148</sup> See Bennett & Neiland (2002) p. 1

<sup>&</sup>lt;sup>149</sup> See Bennett & Neiland (2002) p. 1

<sup>&</sup>lt;sup>150</sup> See Mack & Snyder (1957) pp. 212-213; Fink (1968) p. 412; Thomas (1992) p. 268

<sup>&</sup>lt;sup>151</sup> See Rahim (2001) p. 17

<sup>&</sup>lt;sup>152</sup> See Pondy (1967) p. 298

<sup>&</sup>lt;sup>153</sup> See Fink (1968) p. 412

<sup>&</sup>lt;sup>154</sup> March & Simon (1958) p. 112

<sup>155</sup> See Rahim (2001) p. 17

organisational behaviour. 156 This definition excludes very little of anything happening in a group. 157 But there are not only differences in the definitions of conflict, most scholars agree that conflict always include some opposition, tension or incompatibility. <sup>158</sup> Placing conflict in the context of a buyer-supplier relationship, conflicts arise due the different interests and goals of the two parties. A buyer-supplier conflict can be defined as a disagreement between buyer and supplier that appears because each party strives to achieve its own business goals. 159

#### 5.2 Conflicts in organisations, it has not only negative consequences

Traditionally, conflict is seen as a negative incident with only negative outcomes and needs to be prevented. 160 Later, scholars found that this construct is multidimensional and can also be favourable in certain cases for the involved parties. So, conflicts can be both functional and dysfunctional.<sup>161</sup> A functional conflict is defined as "an evaluative appraisal of the results of recent efforts to resolve disagreements". 162 This means that the functionality of a conflict is the extent to which disagreements have been productively resolved. 163 It refers to situations where the aftermath or outcome of a conflict results in long-term benefits to both exchange partners. 164

In the intra-organisational research, two scholars identified two types of conflict. Jehn (1995) made a distinction between task and relationship conflicts, while Amason (1996) distinguished between cognitive and affective conflicts. 165 These two ways correspond well; cognitive conflicts are similar to task conflicts and are mostly functional, while affective conflict is almost the same as relationship conflict and is mainly dysfunctional. <sup>166</sup> Jehn (1995) defines task conflict as "disagreements among group members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions." In contrast, relationship conflict refers to "interpersonal incompatibilities among group members, which typically includes tension, animosity, and annoyance among

<sup>&</sup>lt;sup>156</sup> See Pondy (1967) pp. 299-300

<sup>&</sup>lt;sup>157</sup> See Rahim (2001) p. 17

<sup>158</sup> See Blazejewski & Becker-Ritterspach (2011) pp. 2-3

<sup>&</sup>lt;sup>159</sup> See Samaha, Palmatier, & Dant (2011) p. 102

<sup>&</sup>lt;sup>160</sup> See Skarmeas (2006) p. 568; Rose & Shoham (2004) p. 942

<sup>&</sup>lt;sup>161</sup> See De Clercq, Thongpapanl, & Dimov (2009) p. 284

<sup>&</sup>lt;sup>162</sup> Anderson & Narus (1990) p. 45

<sup>&</sup>lt;sup>163</sup> See Chung, Sternquist, & Chen (2006) p. 351

<sup>164</sup> See Hunt (1996) p. 419 165 See Rose & Shoham (2004) p. 943

<sup>166</sup> See Ensley, Pearson, & Amason (2002) p. 369

members within a group". <sup>167</sup> The cognitive conflict is defined as "task oriented and focused on judgmental differences about how best to achieve common objectives". <sup>168</sup> By the disagreements about the best way to do something, discussions arise about the alternative ways viewed from multiple perspectives. This improves the overall decision making. <sup>169</sup> On the other hand, affective conflict is seen as personally oriented disagreement focusing on interpersonal dislikes and disaffections. <sup>170</sup> According to Jehn (1995), this type of conflict will cause problems in decision making. <sup>171</sup>

Since these groups are based on the source of the conflict, the outcome of the cognitive or task conflict is not always functional. Another problem with this grouping is that a cognitive conflict can trigger a affective conflict, so a conflict can be cognitive and affective. 172 But there is another way to distinguish between functional and dysfunctional conflict; conflict resolution. The way a conflict is managed determines the outcome of a conflict, whether it is functional or dysfunctional. Maloni and Benton (2000) define conflict resolution as "the ability to manage and resolve a conflict." The impact of the way of managing and resolving a conflict can have productive or destructive effects on the relationship. 174 When two parties who are in a conflict with each other are able to manage and resolve this conflict in such a way that both parties can work together again with no problems, the conflict resolution can be seen as constructive conflict resolution. This makes a conflict turns out to be functional. In that case, the disagreements were productive and helpful with the view on the future and will have a positive outcome. But when two parties can not solve their conflicts together, the conflict resolution process can be seen as a destructive conflict resolution. The negative feelings about each other will increase by this and it will negatively affect the working relationship between the two as well as the outcome. The main difference between a dysfunctional and functional conflict is the outcome of the conflict. The distinction between task or cognitive conflicts on one hand and relationship or affective conflicts on the other is made on the basis of the nature of the conflict. While this most of the time corresponds with the outcome, this is not always the case. Besides that, a task or cognitive conflict can trigger a relationship/affective conflict,

\_

<sup>&</sup>lt;sup>167</sup> Jehn (1995) p. 258

<sup>&</sup>lt;sup>168</sup> Amason (1996) p. 127

<sup>&</sup>lt;sup>169</sup> See Ensley et al. (2002) p. 369

<sup>&</sup>lt;sup>170</sup> See Amason (1996) p. 127

<sup>&</sup>lt;sup>171</sup> See Jehn (1994); cited by Amason (1996) p. 127

<sup>&</sup>lt;sup>172</sup> See Ensley et al. (2002) p. 369

<sup>&</sup>lt;sup>173</sup> Maloni & Benton (2000) p. 56

<sup>&</sup>lt;sup>174</sup> See Assael (1969) p. 581; Deutsch (1969); cited by Mohr & Spekman (1994) p. 139

so a conflict becomes both. Since the construct of conflict resolution is more focused on the outcome of a conflict, instead of the nature of the conflict, this is a better way to distinguish between functional and dysfunctional conflicts. When a conflict is solved in a good way, the conflict becomes functional. In the meantime it could have negative effects, but on the long-term the outcome is positive. Besides that, this method is also more suitable in inter-organisational relationships, because Jehn and Amason did focus on interpersonal relationships. Therefore conflict resolution is included in this research.

# 6. Status, a subjective judgement of rank

# 6.1 Status in organisational theory, a borrowed concept from sociology

The roots of status are in the sociology, the concept of status was already used in the 1930s in this field of research. Having a high status is associated with terms like respected, admired, regarded and prestige. Although the concept exists already a long time, there is no broad agreement on the precise definition of status. For instance, scholars have used status as a subjective evaluation of an entity as well as an objective, structural reality. <sup>175</sup>

A commonly used definition of status in the sociology is the definition from Goldhamer and Shils (1939), they did in fact observe that: "men evaluate the objects, acts, and human attributes with which they come into contact. These evaluations may become systematised into a hierarchy of values... Such a judgment of rank made about either the total person or relatively stable segments of the person constitutes the social status of that person (for the individual making the judgment)." This definition gives a good impression of the most import parts of social status: it is a subjective assessment of social rank based on a hierarchy of values. 177

In the organisational and management theory the concept of status was only introduced in the early 1990s and has received increasing attention from economic sociologists and organisational theorists since that time according to Huang and Washington (2015). Also in this area of research the main focus is on the status of individuals, the status of employees is studied most. Also the idea that organisations itself have status also gets increasingly attention in the literature. In the early days of status becoming increasingly

<sup>&</sup>lt;sup>175</sup> See. Piazza & Castellucci (2014) p. 288

<sup>&</sup>lt;sup>176</sup> Goldhamer & Shils (1939) p. 179

<sup>177</sup> See Piazza & Castellucci (2014) p. 290

<sup>&</sup>lt;sup>178</sup> See Huang & Washington (2015) p. 1752

relevant in the field of organisational and management research, definitions that differ completely from the definitions in the sociology were used. For example, Podolny (1993) defines market status as follows: "I define a producer's status in the market as the perceived quality of that producer's products in relation to the perceived quality of that producer's competitors' products."179

Piazza and Castellucci (2014) concluded that this is just a signal of quality and does not include the social environment or social rank. This economic view of status was in the beginning very popular, but some researchers missed the sociological roots of the concept by excluding any mention of rank order or hierarchy from the definition. 180 Therefore, other scholars used other definitions, like "socially constructed, intersubjective agreed and accepted ordering or ranking of individuals, groups, organisations, or activities in a social system" or "the prestige accorded to firms because of the hierarchical positions they occupy in a social structure". 182 Podolny's early definition of status is now widely seen as unnecessarily limited in explanatory power<sup>183</sup>, as the majority of scholars have acknowledged that status is more than only a signal of quality and they argue that both the sociological and economic view of the concept should be included in the definition. 184 In the introduction of her book 'Status in Management and Organizations', Pearce (2011) combines both views of status by arguing that "status is grounded in social consensus, must be perceived by individuals, and can be assessed via structural characteristics (but is not reduced solely to these measurement indicators)."185 This definition includes both quality and social order. This thesis sees status as a subjective ranking based on characteristics and achievements the assessor thinks are important.

## 6.2 Status in relationships, three different function

Piazza and Castellucci (2014) classified three functions of status in their paper, namely status as signal (of quality), status as intangible assets and status as mobile resource. They stated that they are aware of the fact that this distinction between the different roles of status does not really exist in practice, because status will always play these three roles at the same time. But this distinction is clearly visible in the literature, where studies most of

<sup>179</sup> Podolny (1993) p. 830

<sup>180</sup> See Piazza & Castellucci (2014) p. 291

<sup>&</sup>lt;sup>181</sup> Washington & Zajac (2005) p. 284

<sup>&</sup>lt;sup>182</sup> Jensen & Roy (2008) p. 496

<sup>183</sup> See Jensen, Kim, & Kim (2011 p.87) 184 See Piazza & Castellucci (2014) p. 292

<sup>&</sup>lt;sup>185</sup> Pearce (2011) p. 6

the time focus on one specific role of status. This does not mean these studies pay no attention at all to the other roles, but they highlight just one dimension. 186

The first role of status is status as a signal (mostly of quality). This role is mainly studied in the early research of status in the organisation and management theory. This view of status comes from the need to compensate for, avoid or deal with uncertainty and to do so, the status of a company was used. 187 There are namely many uncertainties in an exchange relationship, because companies do not have all the relevant information or even have wrong information. This uncertainty can come from several sources, for example the variance of the quality can be high. Another possible reason for uncertainty is that collecting information is simply too costly. 188 As a result, "the greater market participants' uncertainty about the underlying quality of a producer and the producer's product, the more that market participants will rely on the producer's status to make inferences about that quality". 189 Although this role of status is similar to reputation and the concept of status has been developed in the management and organisation theory since the introduction of it, this view of status remained popular among scholars. The reason for this is probably the intuitiveness of this idea combined with the broad cross-disciplinary attraction of it. 190 A recent example of a study to the signalling effect of status is the research of Pollock et al. (2010). They assessed the value of high-status affiliates for young, unproven firms. Their study was based on a sample of 257 initial public offerings (IPO's). They found a positive linear relationship between the amount of prestigious executives and outside directors affiliated with the newly launched IPO and the valuation of the IPO. 191 This makes clear that new firms, which do not have a clear defined position in the status hierarchy, can overcome uncertainty by exploiting affiliations with high-status companies to signal quality. 192 Another study done to the effects of status as signal of quality, is the research of Malter (2011). He explored the antecedents and consequences of status of French wineries with the effects of the quality of the produced wine and reputation are also taken into account. The study shows that indeed the signalling role of status exists, however when the effects of quality and reputation are included as control

\_

<sup>&</sup>lt;sup>186</sup> See Piazza & Castellucci (2014) p. 301

<sup>&</sup>lt;sup>187</sup> See Piazza & Castellucci (2014) p. 302

<sup>&</sup>lt;sup>188</sup> See Piazza & Castellucci (2014) p. 302

<sup>&</sup>lt;sup>189</sup> Podolny (2005 p.18), cited by Piazza & Castellucci (2014) p. 302

<sup>&</sup>lt;sup>190</sup> See Piazza & Castellucci (2014) p. 302

<sup>&</sup>lt;sup>191</sup> See Pollock, Chen, Jackson, & Hambrick (2010) pp. 6-7

<sup>&</sup>lt;sup>192</sup> See Malter (2011a) p. 44

variables, the effect of the signalling role of status is significantly reduced. 193 According to Piazza and Castelucci, this research is very important for future research to the signalling effect of status. It makes clear that status signals should be clearly distinguished from quality and reputation signals. 194

Another way of seeing status is that status is an intangible asset for the individual or organisation holding it. This view is broader than the view of status simply reduced as a signal of quality or performance. Viewed from this perspective, having a high status ensures several positional advantages (getting a better reward for a certain effort, for example better payment for men compared to women) and often strains from individual characteristics and abilities. This makes this view popular in the organisational behaviour literature. 195 In the field of sociology many scholars make a distinction between earned and ascribed status. 196 Earned status can be acquired on the basis of achievement and performance. On the other hand, ascribed status is granted based on certain characteristics like gender and race. Therefore getting ascribed status is beyond the control of an individual. 197

On micro level, researchers are mostly concerned with the effects of ascribed status. They look into the differences in the outcome for men and women or the different races. O'Brien and Dietz (2011) argued that ascribed status plays a big role in organisations. Building on the social dominance theory, they argue that differences in ascribed status (such as gender and race) are the base of multiple hierarchies in organisations. 198 These differences are the main focus of the empirical research on status as an intangible asset, studying the advantages of having status, the behaviour patterns that are created by the ascribed status hierarchies and the related difficulties for the low-status actors. 199 A recent study to this role of status comes from Duguid et al. (2012). They tried to explain the variance in individuals' concerns about being considered as a value member of a team by status. They found that individuals who have a low categorical status (status as a result of being part of a certain category, like with gender or race) and belong to a numerical underrepresentation in the group at a job with high prestige (for example women and racial minorities in highly

<sup>&</sup>lt;sup>193</sup> See Malter (2011b) p. 2

<sup>&</sup>lt;sup>194</sup> See Piazza & Castellucci (2014) p. 303

<sup>&</sup>lt;sup>195</sup> See Piazza & Castellucci (2014) p. 303

<sup>196</sup> See Foladare (1969; Linton (1936; cited by Piazza & Castellucci (2014) p. 303 197 See Piazza & Castellucci (2014) p. 303 198 See O'Brien, Dietz, & Pearce (2011)

<sup>&</sup>lt;sup>199</sup> See Piazza & Castellucci (2014) p. 303

qualified jobs) are feeling more threatened by the potential inclusion of others who are similar to them.<sup>200</sup> This is contrary to the homophily-based reasoning, which assumed that people prefer contact with similar people among dissimilar people.<sup>201</sup>

The role of status as intangible asset is also studied on a macro level, mainly focused on the role of status of firms by forming alliances and the outcome of these alliances. For example, Chung et al (2000) explore factors that drive alliance formation, including status similarity. They did this research in the field of investment banking firms in the United States. The findings indicate that investment banks of similar status are more likely to become alliance partners.<sup>202</sup> To cite a more recent example of a study exploring status as an intangible asset, Shipilov and Li (2008) analyse the structural holes (when a firm maintain links with groups of otherwise disconnected partners) of investment banks in the United Kingdom. They found that status accumulation, the ability of firms to increase their status as a group by forming cooperative relationships, has a positive impact on revenue generation.<sup>203</sup> Shipilov et al. (2011) further studied the role of status in the selection of partners. They examined the influence of a brokerage position of a firm in combination with aspiration-performance gaps on an organisation's propensity to initiate ties to partners of different status. They found that firms in brokerage positions are more likely to initiate ties to others of a different status than non-brokers.<sup>204</sup>

The two roles of status discussed above mainly focus on the positive and negative effects of having high or low status, but often do not look into the possibility that the status hierarchy can change, so a low-status actor becomes a high-status actor over time or vice versa. The third assumption of the different roles of status addresses this concern, it sees status as a mobile resource. 205 This means that status can be transferred from one actor to another through a relationship between the two. <sup>206</sup> This highlights the social nature of the construct and makes a clear distinction between status and the economic concept of reputation.<sup>207</sup> The foundation for this role of status has been laid by Podolny and Phillips (1996). They studied the growth and decline of status of investment banks in the eighties.

See Duguid, Loyd, & Tolbert (2012)
 See McPherson, Smith-Lovin, & Cook (2001) p. 416

<sup>&</sup>lt;sup>202</sup> See Chung, Singh, & Lee (2000) p. 1

<sup>&</sup>lt;sup>203</sup> See Shipilov & Li (2008) p. 73

<sup>&</sup>lt;sup>204</sup> See Shipilov et al. (2011) p. 1418

<sup>&</sup>lt;sup>205</sup> See Piazza & Castellucci (2014) p. 303

<sup>&</sup>lt;sup>206</sup> See Podolny (2001) p. 41

<sup>&</sup>lt;sup>207</sup> See Podolny (2010) pp. 14-18

They found that performance in the past has a positive effect on the future status of a company, as well as having higher-status affiliates. Since the low-status actor benefits from the relationship with a higher-status actor due an increase in its own status, the higherstatus actor wants to get something in return for this. 208 Castellucci and Ertug (2010) build on this idea with their research, they explored the reasons for high-status companies to engage relationship with low-status firms in the field of Formula 1 racing. They found that high-status firms can secure greater effort from low-status firms. This effect will be bigger when the differences in status between the partners is also bigger. This effort of the lowstatus firm has a positive impact on the performance of the high-status company and compensates the negative consequences for high-status firms to engage in a relationship with firms of a lower status. <sup>209</sup> Bothner et al. (2010) also tested the dynamic view of status in their research to network fragility as a determinant of status evolution. Their results support the idea that status of an actor will increase over time when this actor is connected with multiple high-status actors in a network. Such a network allows for status transfer, but in a way the low-status actor does not rely on one high-status actor. That makes the process of transferring status easier, because if one high-status actor fall out of grace, the lowstatus actor still has support from other high-status actors. But only affiliated with highstatus actors is not enough, although it is necessary for the transfer of status: diversification is also key to a sustained, favourable position within the status hierarchy. <sup>210</sup>

This thesis endorses the assumption that status influences the exchange relationship in three ways. Status has a signalling effect, although this function has little to no effect for a buyer in a buyer-supplier relationship since the supplier sells the products to the buyer. The only way this can play a role is that the supplier is associated with the outcome of the buyer. Status is also an intangible asset, based on both characteristics and achievements of the organisation. In this way, having a higher status will ensure some benefits.<sup>211</sup> Besides that, status is also a dynamic concept. The status of an actor can change over time, including transferring from one actor to another. So a lower-status actor can benefit from a higher-status actor in a relationship by an increase in its status. The higher-status actor will

<sup>208</sup> See Podolny & Phillips (1996)
209 See Castellucci & Ertug (2010)

See Bothner, Smith, & White (2010)

<sup>&</sup>lt;sup>211</sup> See Piazza & Castellucci (2014) p. 303

want something in return for this process.<sup>212</sup> This will also be the case in a buyer-supplier relationship.

#### 7. Hypotheses

# 7.1 Coercive power has a negative influence on supplier satisfaction, while reward power positively impacts supplier satisfaction

Power is used as a tool to let another party do something the power holder wants and often this is against the will of the other. It is almost always used for only the power holder's own win. The power holder tries to appropriate more value for itself in the relationship, mostly at the expense of the other party. 213 When the target firm perceives it this way, it will express a higher level of dissatisfaction.<sup>214</sup> Also the use of power leads to negative feelings by the target firm, due to a loss of autonomy, since power is a tool used to let the target firm do something against it will. This will lower the social outcome of the exchange relationship.<sup>215</sup> These effects of power are also found by past studies studying interpersonal relationships, individuals express a lower level of satisfaction when their supervisor uses power over them.<sup>216</sup> So in general the use of power is experienced as unpleasant, what lowers the social outcome of the relationship. This makes the use of power a source of dissatisfaction. But this makes no distinction between the different ways of using power. Since these different forms of power have different effects on the outcome for the target firm, critical part of satisfaction, it is likely that different sources of power will impact supplier satisfaction differently.

Coercive power is used through threats which will be executed unless the other party performs the desired behaviour. Being exposed to coercive power as a supplier and by that to threats and/or punishment by the buyer will often bring costs<sup>217</sup> and generally reduce the value of the outcome of the relationship.<sup>218</sup> Therefore, the use of coercive power of the buyer will lead to a decrease in economic value for the supplier, what is an important part of the outcome of the relationship. Since satisfaction is the result of the comparison

 <sup>&</sup>lt;sup>212</sup> See Piazza & Castellucci (2014) p. 303
 <sup>213</sup> See Gulati & Sytch (2007); Johnson et al. (1993); cited by Nyaga, Lynch, Marshall, & Ambrose (2013) p.

<sup>&</sup>lt;sup>2</sup>
See Nyaga et al. (2013) p. 6

<sup>&</sup>lt;sup>215</sup> See Ramaseshan, Yip, & Pae (2006) p. 65

<sup>&</sup>lt;sup>216</sup> See Fragale, Overbeck, & Neale (2011) p. 769

<sup>&</sup>lt;sup>217</sup> See Anderson & Narus (1990) p. 46

<sup>&</sup>lt;sup>218</sup> See Scheer & Stern (1992) p. 131

between the expectation and the outcome, this will lead to a lower level of supplier satisfaction. Geyskens et al. (1999) found that channel members that are exposed to the coercive power do not want to be involved with the user of this power.<sup>219</sup> Geyskens and Steenkamp (2000) came to the same conclusion, they stated that dealers do not like to interact with parties that use coercive power.<sup>220</sup> This feeling of not wanted to interact anymore with these parties can be seen as a part of the social outcome of the relationship and leads to dissatisfaction with the relationship. Also, Brown et al. (1995) found in their study that the use of coercive power leads to a negative attitude toward cooperation with the user of the power. <sup>221</sup> In line, Skinner et al. (1992) studied among others the relationship between different bases of power, cooperation between firms and satisfaction of the relationship. They found that the use of coercive power leads to less cooperation, which has a negative impact on satisfaction.<sup>222</sup> Also this negative attitude to cooperation and the actual reduced cooperation are negative social outcomes and thus lowers the level of satisfaction. In another study researching the impact of power and relationship commitment on supply chain integration, Zhao et al. (2008) found a negative relationship between coercive power and the supplier's willingness to invest relationship resources in a relationship.<sup>223</sup> When a supplier is happy with the relationship, it wants to maintain this for a long time and is willing to makes investments in this relationship. The negative effect of coercive power on the supplier's willingness to invest indicates a lower level of satisfaction due the use of this source of power. Besides that, coercive power will also lead to an unfair outcome, which leads to the target firm seeks ways to resist to the power holder.<sup>224</sup> This explains why coercive power will probably have a negative effect on supplier satisfaction.

On the other hand, reward power refers to the ability of a buying firm to offer benefits that are attractive to the supplier. 225 This source of power is still used to influence the other party's behaviour, but in a more positive way than coercive power. However, the target firm will still lose some autonomy, since it does what the power holder wants. It gets namely only a reward if it complies with the wishes of the power user, so it acts like the

<sup>&</sup>lt;sup>219</sup> See Geyskens et al. (1999) p. 227

<sup>&</sup>lt;sup>220</sup> See Geyskens & Steenkamp (2000) p. 15

<sup>&</sup>lt;sup>221</sup> See Brown et al. (1995); cited by Ke, Liu, Wei, Gu, & Chen (2009) p. 840

<sup>&</sup>lt;sup>222</sup> See Skinner, Gassenheimer, & Kelley (1992) p. 174

<sup>&</sup>lt;sup>223</sup> See Zhao et al. (2008) p.b381

<sup>&</sup>lt;sup>224</sup> See Kumar (1996); cited by Pulles et al. (2014) p. 20 <sup>225</sup> See Pulles et al. (2014) p. 20

power holder wants instead of the way it would have acted originally.<sup>226</sup> This is not pleasant for the target firm. Since the social part of satisfaction is about the evaluation of the psychosocial aspects of a relationship, this has a negative impact on the social outcome. However, by the use of reward power, the power holder convinces the other to do what the power holders want by giving a reward. The other party chooses to act like the power holder desires over to ignore it, because it prefers the increase of economic value the reward brings. The increase of the economic outcome will have a positive effect on the level of satisfaction. 227 Nyaga et al. (2013) stated the same in their research to the effects of perceptions of power use and prevailing on behavioural and operational outcomes. Whereas coercive power can be viewed as a form of opportunism in which the buying firm expects to gain at the expense of the supplying firm and leads to negative emotions by the supplier, reward power, in contrast, is likely to encourage positive perceptions by the supplier. These positive perception can lead to a higher level of satisfaction. They also found that the use of reward power is positively related to the supply chain partner's collaborative and adaptive behaviour, which are social outcomes.<sup>228</sup> Skinner et al. (1992) found in their study that the use of reward power leads to more interfirm cooperation, which has a positive effect on the social outcome.<sup>229</sup> Similarly, the study of Zhao et al. (2008) found reward power to positively relate to the supplier's willingness to invest in relationship resources, which indicates that the supplier is satisfied with the relationship (because investing indicates a long-term vision and satisfaction is a necessarily condition for that). 230 It is likely that the negative effects of losing autonomy due reward power are compensated by the increase of other social outcomes and the increase of economic value and that the net effect of reward power on the outcome is positive. Therefore, it is hypothesised that:

H1: The use of coercive power has a negative impact on supplier satisfaction.

H2: The use of reward power has a positive impact on supplier satisfaction.

#### 7.2 Conflict is influenced by the use of power

The power holder uses its power to influence the behaviour of another party to act as the power holder desires. The power is mainly used for the own benefit of the power holder

<sup>&</sup>lt;sup>226</sup> See Ramaseshan et al. (2006) p .65

<sup>&</sup>lt;sup>227</sup> See Ramaseshan et al. (2006) pp. 64-65

<sup>&</sup>lt;sup>228</sup> See Nyaga et al. (2013 p.11)

<sup>&</sup>lt;sup>229</sup> See Skinner et al. (1992) p. 174

<sup>&</sup>lt;sup>230</sup> See Zhao et al. (2008) p. 381

and mostly on the cost of the target firm. This is unpleasant for the one over who power is wielding and leads to negative feelings.<sup>231</sup> All these negative feeling which have emerged in the interaction between the two companies will create a tense atmosphere. Since a conflict can be seen as a disagreement and the tension between buyer and supplier that appears because each party strives to achieve its own business goals<sup>232</sup>, the use of power can lead to conflicts. But again, not all sources of power have the same effect.

Coercive power can be seen as opportunistic behaviour. Opportunism is characterised by a lack of openness and honesty in transactions, including self-interest seeking behaviour by misleading and confusing exchange partners.<sup>233</sup> Opportunistically acting, like misrepresenting information and material facts, evades obligations, fails to honour promises and demonstrates no regard for principle, produces feelings of tension and frustration because the operations of the target firm are disrupted and its sense of justice is undermined.<sup>234</sup> Besides, the use of coercive power leads to the target firm doing things against its will.<sup>235</sup> This causes tension and frustration by the target firm. This is in line with other authors, who all stated that the target is expected to feel tension and frustration when it is exposed to coercive power.<sup>236</sup> When this happens, disagreements are expected to be expressed frequently between suppliers and distributors because of this tension and frustration.<sup>237</sup> Zhuang et al. (2010) stated that the use of coercive power leads to conflicts because the target firm will be affected financially if it does not agree to the wishes of the power holder.<sup>238</sup> Besides that, when the target firm feels being attacked due to coercive power regardless of its own behaviour, it is more likely to use power itself or to revolt against the more powerful firm's domination.<sup>239</sup> This will increase the number of conflicts in the future.

On the other hand, the use of reward power will have other effects. This source of power refers to the capacity of the buyer to offer benefits to the supplier that are considered as attractive. An example of such benefit is to increase the business with the supplier in the

<sup>&</sup>lt;sup>231</sup> See Skarmeas (2006) p. 568

<sup>&</sup>lt;sup>232</sup> See Samaha et al. (2011) p. 102

<sup>&</sup>lt;sup>233</sup> See Williamson (1985); cited by Skarmeas (2006) p. 569

<sup>&</sup>lt;sup>234</sup> See Skarmeas (2006) p. 569

<sup>&</sup>lt;sup>235</sup> See Welch & Wilkinson (2005) p. 206

<sup>&</sup>lt;sup>236</sup> See Lusch (1976; Brown et al. (1995); Gaski & Nevin (1985)

<sup>&</sup>lt;sup>237</sup> See Frazier & Rody (1991) p. 56

<sup>&</sup>lt;sup>238</sup> See Zhuang, Xi, & Tsang (2010) p. 140 <sup>239</sup> See Lawler, Ford, & Blegen (1988) p. 104

future.<sup>240</sup> Due to giving the reward to the supplier, the supplier will feel obligated to agree with the power holder, since the power holder provided him with rewards (and thus more value).<sup>241</sup> So because of the rewards offering by the power holder, the target firm will agree to the wishes of it. The target firm evades disagreements and thus conflicts, in order to get the promised rewards and maybe get in the future more rewards. Also the positive sanctions enhance the target firm's willingness to cooperate with the power holder, what lead to a decrease of clashes.<sup>242</sup> Also Skinner et al. (1992) found in their study that the use of reward power leads to more willingness to cooperate with the power holder.<sup>243</sup> This willingness to cooperate of the target firm will lead to less tension in the relationship and also less disagreements. Therefore, it is hypothesised that:

H3: The use of coercive power has a positive impact on conflict.

H4: The use of reward power has a negative impact on conflict.

### 7.3 The use of power affects the process of conflict resolution

A conflict does not necessarily have to be a bad thing, it can have benefits for the relationship on the long-term. This depends on how a conflict is managed, how the process of conflict resolution proceeds. Conflict resolution refers to the ability to manage and resolve a conflict. When this process proceeds well, the conflict resolution process can be seen as constructive and productive. Is this not the case, this process is destructive. This process of managing a conflict makes a distinction between a functional and a dysfunctional conflict. Accordingly, functional conflict is defined as "an evaluative appraisal of the results of recent efforts to manage disagreements." It refers to situations where the outcome of a conflict has beneficial results to both exchange partners, instead of negative results.

As already stated, the use of coercive power leads to negative emotions, tension and frustration by the target firm. This increases the chance that exchange partners lock themselves into a conflict spiral, instead of working together to resolve the relationship

<sup>&</sup>lt;sup>240</sup> See Pulles et al. (2014) p. 20

<sup>&</sup>lt;sup>241</sup> See Lusch (1976) p. 384

<sup>&</sup>lt;sup>242</sup> See Lusch (1976) p. 384

<sup>&</sup>lt;sup>243</sup> See Skinner et al. (1992) p. 174.

<sup>&</sup>lt;sup>244</sup> Maloni & Benton (2000) p. 56

<sup>&</sup>lt;sup>245</sup> See Assael (1969) p. 581; Deutsch (1969); cited by Mohr & Spekman (1994) p. 139

<sup>&</sup>lt;sup>246</sup> Anderson & Narus (1990) p. 45

<sup>&</sup>lt;sup>247</sup> See Hunt (1996) p. 419

problems in a mutually beneficial way.<sup>248</sup> This in line with Brown et al. (1995), they found in their study that the use of coercive power leads to a negative attitude toward interorganisational cooperation with the user of the power.<sup>249</sup> Also Skinner et al. (1992) found that the use of coercive power leads to less cooperation. <sup>250</sup> Sanzo et al. (2003) came to a similar finding. They found that the use of coercive power will limit the communication between the two parties involved.<sup>251</sup> Less cooperation and communication between the parties ensures that the process of conflict resolution can not be run smoothly. Also the decrease in willingness to cooperate by the supplier will lead to less effort from the supplier to solve the conflict. This will lead to a poor management of conflicts.

While on the other hand, the use of reward power by the buyer, is likely to encourage positive perceptions of the target firm. <sup>252</sup> Due to the rewards that are given and the positive perceptions of the target firm, the willingness of the target firm to cooperate will increase. It will make more effort to solve conflicts and tries to manage conflicts in a positive way. Also the communication between the two parties will be better compared to a situation when the buyer uses coercive power. Communication between the parties is necessary to resolve the conflict, otherwise the process of conflict resolution can not proceeds. Therefore, it is hypothesised that:

H5: coercive power has a negative impact on conflict resolution

H6: reward power has a positive impact on conflict resolution

#### 7.4 Conflicts has a negative influence on the level of satisfaction

Rosenberg (1974) identifies several consequences of conflicts in international distribution channels. He stated that conflicts lead to a decrease in efficiency in distribution and consequently to increased costs. This means that conflicts will lower the economic outcome of the interaction between firms and by that the level of satisfaction. Other negative aspect of conflicts he found are the resistance to resolve future conflicts, emotional disruption and the damage created through subjectivity and distorted judgments. This has a negative impact on the social outcome of the relationship. 253 More recent studies

<sup>&</sup>lt;sup>248</sup> See Skarmeas (2006) p. 569

<sup>&</sup>lt;sup>249</sup> See Brown et al. (1995; cited by Ke et al. (2009) p. 840

See Skinner et al. (1992) p. 174
 See Sanzo, Santos, Vázquez, & Álvarez (2003) p. 333

<sup>&</sup>lt;sup>252</sup> See Nyaga et al. (2013) p .49 <sup>253</sup> See Rosenberg (1974) p. 73

also found that the outcome of a relations is impacted by conflicts. Rose and Shoham (2004) found that conflict reduce the quality of strategy and thereby also operating performance.<sup>254</sup> The study of Webb and Hogan (2002) showed that the frequency of the conflict, however not the intensity, has a negative effect on channel performance. <sup>255</sup> This is in line with Rose et al. (2007), who found that conflict negatively impact performance with channels of distribution.<sup>256</sup> The reduced performance leads to a decrease in economic outcome and by that a decrease in satisfaction.

This is in line with other studies, which found direct links between conflict and performance. Specifically, Jehn (1994) reported that conflict reduced intragroup performance and satisfaction.<sup>257</sup> Gaski (1984) concluded that conflict reduced channel member' satisfaction and channel performance. 258 Also Essig and Amann (2009) thought that conflicts have an impact on supplier satisfaction, they made 'conflict management' a part of the supplier satisfaction index.<sup>259</sup> Therefore, it is hypothesised that:

H7: Conflict has a negative impact on supplier satisfaction.

# 7.5 Not all the conflicts have a negative impact on supplier satisfaction

Not all conflicts are the same, different conflicts have different effects on the long-term. All conflicts lead to some negative feelings, negative emotions and tension on the shortterm, but on the long-term the effects of a conflict can be positive or negative. As already explained there are strong differences between functional and dysfunctional conflicts. How a conflict turns out, depends mainly on the conflict resolution. The impact of conflict resolution on the relationship can be productive or destructive. 260 This mean that the way in which partners resolve a conflict has effects on the success of the relationship. <sup>261</sup>

When a conflict occurs between a buyer and a supplier, this has some negative consequences on the short-term. There are negative feelings between both parties, which can have a negative impact on the cooperation between the two companies. But when the management of conflicts, the conflict resolution, is proceeding well a conflict can appear to

<sup>&</sup>lt;sup>254</sup> See Rose & Shoham (2004) p. 942

<sup>255</sup> See Webb & Hogan (2002) p. 348

<sup>&</sup>lt;sup>256</sup> See Rose, Shoham, Neill, & Ruvio (2007) p. 296

<sup>&</sup>lt;sup>257</sup> See Jehn (1994) p. 223

<sup>&</sup>lt;sup>258</sup> See Gaski (1984)

<sup>&</sup>lt;sup>259</sup> See Essig & Amann (2009) p. 106

<sup>&</sup>lt;sup>260</sup> See Assael (1969) p. 581; Deutsch (1969); cited by Mohr & Spekman (1994) p. 139 <sup>261</sup> See Mohr & Spekman (1994) p. 139

be functional. 262 A functional conflict can contribute to increasing the effectiveness of the relationship by for example improved decision quality, reduced likelihood of future destructive conflict, more mutually beneficial solutions and better goal achievement.<sup>263</sup> It will also improve the communication between the firms. 264 Besides that, a functional conflict can also produce a sense of unity between the involved parties<sup>265</sup> and increase the financial performance of both parties. 266 This all will increase the outcome, both social and economic, of the relationship on the long-term.<sup>267</sup> So when the conflict resolution is going well, the long-term benefits will compensate the short-term negative effects. Therefore, it is hypothesised that:

H8: Conflict resolution negatively moderates the negative impact of conflict on supplier satisfaction.

# 7.6 Status weakens the effect of coercive power on supplier satisfaction and strengthens the effect of reward power

Recently, there is attention in the literature for the interactive effects of power and status of the power holder. All the researches done in this are on an interpersonal level. For instance, Fragale et al. (2011) found that individuals with high power, but without status are judged as cold, but power with status is associated with warmth. Anicich et al. (2016) found that high power combined with low status is a direct source interpersonal conflict and demeaning treatment. Increasing the status of a high-power role reduces conflict whereas decreasing its status increases conflict.<sup>269</sup> Overall, high power with low status was found to be negative and higher status softened the effect of power. The idea of an interaction effects between power and status is based on a similarity of the two concepts: power and status are both sources of being potentially able to influence others.<sup>270</sup> In contrast to power, status is given voluntarily by the other firm. In other words, power is more of a property of the actor, while status is more of a property of co-actors and observers.<sup>271</sup> So when the

<sup>&</sup>lt;sup>262</sup> See Hunt (1996) p. 420

<sup>&</sup>lt;sup>263</sup> See Pruitt & Rubin (1986); Tjosvold (1997); cited by Skarmeas (2006) p. 568

<sup>&</sup>lt;sup>264</sup> See Assael (1969) p. 581

<sup>&</sup>lt;sup>265</sup> See Rosenberg & Stern (1971; cited by Lorentz et al. (2012) p. 37

<sup>&</sup>lt;sup>266</sup> See Dommermuth (1976); cited by Hunt (1996) p. 420

<sup>&</sup>lt;sup>267</sup> See Hunt (1996) pp. 419-420

<sup>&</sup>lt;sup>268</sup> See Fragale et al. (2011) p. 767

<sup>&</sup>lt;sup>269</sup> See Anicich et al. (2015) p. 1123

<sup>&</sup>lt;sup>270</sup> See French et al. (1959); cited by Fragale et al. (2011) p. 767
<sup>271</sup> See Magee & Galinsky (2008) pp. 363-364

status of the buyer is high, the supplier accepts that the buyer will influence it and therefore accepts the use of power of the buyer. 272

By accepting the use of power by the other firm, also the consequences of the use of power are accepted.<sup>273</sup> Power is used to appropriate more value for the power holder in the relationship, mostly at the expense of the target firm. This leads to an unfairly division of the outcome, but this is accepted by the target firm if the power holder has a higher status according to the target firm. Also the loss of autonomy due the use of power of the power holder will be accepted. The reason for this is that by granting a higher status to the power holder, also the right to influence is given to the power holder.

The same applies to the effects of the use of coercive power. The negative feelings and the negative attitude toward inter-organisational cooperation with the user of the power which are a result of coercive power will be less present/minimalised when the power user has a higher status than the target firm. Also the opportunistic behaviour is accepted and therefore the negative impact of opportunistic behaviour is weakened. But only the lower social outcome is accepted. The reduced economic value of the relationship due the use of coercive power still has a negative impact on the level of satisfaction.

So by granting a higher status to the power holder, also the right to influence is given to the power holder. But when the power holder then chooses to use reward power, the more positive source of power, instead of coercive power, the positive effects will be strengthened. The loss of autonomy and limited negative feelings caused by reward power will be accepted and have limited negative effects on the social outcome. Besides that, a company benefits from having a relationship with a higher-status actor due to status transfer. In return it will put extra effort into the relationship. When the higher-status actor also gives rewards, which is not necessary since the lower-status actor already wants to do something in return for the increase in status, the positive effect of the reward will be even more strengthened. Next to this effects, the increase of economic value due to the rewards are the same. That means that the overall outcome increases and by that, also the level of satisfaction will be higher. Therefore, it is hypothesised that:

H9: Status negatively moderates the negative effect of coercive power on supplier satisfaction.

 $<sup>^{272}</sup>$  See Sell, Lovaglia, Mannix, Samuelson, & Wilson (2004) p. 48  $^{273}$  See Sell et al. (2004) p. 48

H10: Status positively moderates the positive effect of reward power on supplier satisfaction.

#### 7.7 Status helps to receiving a preferred customer status

According to Piazza and Castellucci (2014), status can play multiple roles. One of them is that social status can be seen as a transferable asset, so being in a relationship with a buyer with a high status has a positive effect on the own status of the supplier.<sup>274</sup> Building on the idea of status being transferable, Castellucci and Ertug (2010) found in their study that high-status firms can secure a greater effort in relationships with low-status firms. These low-status firms are willing to do something extra for the high-status firms if they can profit from the higher status.<sup>275</sup> In return for the increase of status the low-status supplier gets from interaction with a buyer with a high status, the supplier could give the buyer a preferred customer status. So the supplier awards a preferred customer status in exchange for an increase of its social status.

Another role status can play in a interfirm relationship is the role of intangible resource. Status plays an important role in the formation and development of cooperative relationships with other companies <sup>276</sup> The development of the relationship is necessary in the process of becoming a preferred customer according to the steps of Nollet (2012). <sup>277</sup> This is in line with Perrow (1961), who stated that status of the buyer influences the process of resource allocation by the supplier. <sup>278</sup> These ideas also appear in other studies of status. Patterson et al. (2014) stated that most researchers agreed that status can lead to benefits. <sup>279</sup> For example Podolny (1993) indicated that "a higher status leads to lower transaction costs in forming syndicate and investor relations." <sup>280</sup> Similar Washington & Zajac (2005) argued that high status actors receive benefits that can not be explained by their performance. <sup>281</sup> So, previous studies found that status can provide privileges, benefits and also competitive advantages. <sup>282</sup> Since only high status firms can obtain these privileges, benefits and competitive advantages, it is similar to preferred customers. The

<sup>&</sup>lt;sup>274</sup> See Piazza & Castellucci (2014) p. 301

<sup>&</sup>lt;sup>275</sup> See Castellucci & Ertug (2010) p. 149

<sup>&</sup>lt;sup>276</sup> See Piazza & Castellucci (2014) p. 303

<sup>&</sup>lt;sup>277</sup> See Nollet et al. (2012) p. 1190

<sup>&</sup>lt;sup>278</sup> See Perrow (1961) p. 341

See Patterson, Cavazos, & Washington (2014) p. 76

<sup>&</sup>lt;sup>280</sup> Podolny (1993) p. 851

<sup>&</sup>lt;sup>281</sup> See Washington & Zajac (2005) p. 284

<sup>&</sup>lt;sup>282</sup> See Patterson et al. (2014) p. 75

preferred customers also receive better treatment. Therefore, it can be hypothesised that status could have an influence on a preferred customer status:

H11: Having a high status as buyer has a positive impact on getting a preferred customer status.

## 7.8 Supplier satisfaction leads to preferred customer status

In the existing literature, supplier satisfaction is seen as necessary condition for achieving a preferred customer status.<sup>283</sup> Scholars argue that satisfied suppliers allocate their best resources to relationships, giving the buyers who satisfied them best a preferred customer status over other buyers.<sup>284</sup> This view is supported by the social exchange theory; the principal idea of this theory is that you will get back what you give. So the better a buyer is able to fulfil the expectations of the supplier, which makes the supplier more satisfied, the more the supplier will try to let the buyer feel the same. Thus the buyer who fulfilled the expectations the most or satisfied the supplier best, has a higher chance of receiving a preferred customer status. Vos et al. (2016) empirically supported this idea in their research. They found a significant positive influence of supplier satisfaction on preferred customer status.<sup>285</sup> Therefore, it is hypothesised that:

H12: Supplier satisfaction has a positive impact on awarding a preferred customer status to the buyer.

 <sup>&</sup>lt;sup>283</sup> See Hüttinger et al. (2012) pp. 1202-1203
 <sup>284</sup> See Hüttinger et al. (2012) p. 1203
 <sup>285</sup> See Vos et al. (2016) p. 4613

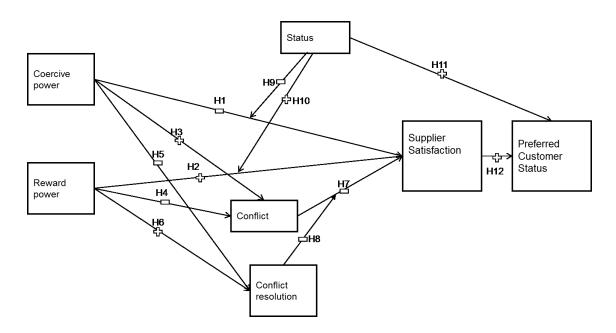


Figure 3. Conceptual research model

### 8. Methodology

#### 8.1 The University of Twente, a special case

The research of this thesis is conducted at the University of Twente (UT). This university was founded in 1961, opened in 1964 and was first mentioned as Technische Hogeschool Twente (THT). It is called Universiteit Twente since 1986. The UT is a technical university, but also offers degrees in non-technical studies. There are working around 3.000 professionals and researchers at the UT and the university has more than 9.000 students. The UT has almost 7.000 suppliers, of which 250 have a permanent contract. In total the purchase volume is more than €77 million.

This study builds on the researches of Hüttinger et al. (2014)<sup>286</sup> and Vos et al. (2016)<sup>287</sup> and can be seen as a partially replication of these studies. Vos et al. (2016) points out that a replication in combination with extending on that research can be very valuable for obtaining new and more insights in a research field.<sup>288</sup> This will increase the possibility to generalise the results, as a greater population or populations under different circumstances are tested. Hüttinger et al. (2014) tested the model with data collected at an automotive manufacturer for direct procurement and Vos et al. (2016) collected data on indirect

<sup>&</sup>lt;sup>286</sup> See Hüttinger et al. (2014)

<sup>&</sup>lt;sup>287</sup> See Vos et al. (2016)

<sup>&</sup>lt;sup>288</sup> See Vos et al. (2016) p. 4621

procurement of a chemical company. <sup>289</sup>The context of this case is different. The University of Twente is a public institution, which differs from a private company. First, instead of maximising the profit, the goal is to maximise the value for the researchers and students. But the biggest difference in the field of purchasing is that purchasing of public organisation is directed by the government. When a public institution wants to purchase a specific amount of work, service and/or supply, it has to follow given rules and procedures most of the time. Since no previous study tested the concepts of supplier satisfaction and preferred customer status at a public institution, this study will provide insights whether the model is also applicable for public institutions.

#### 8.2 Systematic literature search

A systematic literature search on the most important subjects was conducted as a start of this thesis. The reason for this is to summarise the existing literature on these topics and to provide a theoretical background on these concepts as a solid base for this empirical research. There is been searched for articles about supplier satisfaction, preferred customer status, power, conflict and status. In order to develop a good search strategy, recent articles were used as a base to define the construct. The article of Hüttinger et al. (2012) is used as basis for supplier satisfaction and preferred customer status. This article provides a literature review of customer attractiveness, supplier satisfaction and preferred customer status.<sup>290</sup> The article of Johnson and Lacoste (2016)<sup>291</sup> was used as start of the search to power and conflict and article of Piazzi and Casteluzzi (2015)<sup>292</sup> is the starting point for status. These articles provide a good view of the concepts and by that, a list of relevant search terms was compiled. Using these search terms, an analysis of theory and literature have been done in a structured manner in the Scopus-database. The found articles have been assessed based on their title and abstract as useful or not. See table 5 for a summary of the search results per search query. In addition to this structured search for literature via Scopus, also other search engines were used in order to find articles that are not available in the Scopus database (namely Google Scholar and Web of Science). Next to the articles founded in this way, the strategy 'backward and forward reference searching' was used. Backward reference searching involves identifying and examining the references or works cited in an article. Forward reference searching is when a researcher identifies articles that

<sup>&</sup>lt;sup>289</sup> See Vos et al. (2016) p. 4616

<sup>290</sup> See Hüttinger et al. (2012) 291 See Johnsen & Lacoste (2016)

<sup>&</sup>lt;sup>292</sup> See Piazza & Castellucci (2014)

cite a particular article or work in a publication. The articles found with this strategy were also examined based on their title and abstract. In this way the number of useful articles founded was extended. In order to identify more literature that matches the level of analysis of this study (inter-organisational relationships), also search terms in combination with terms like 'buyer-supplier relationship' and 'inter-organisational relationship' have been used.

Table 5. Literature search details

Search	Initial	Selection criteria	Useful title	Useful abstract	Final
"supplier satisfaction"	41	-	21	17	16
"preferred customer"	42	-	20	17	15
"power"	2.403.155	59*	34	16	14
"conflict"	257.306	86**	28	15	15
"status"	1.364.451	184***	83	37	32

Notes: \*= searched in "Business, Management and Accounting", limited to articles since 2012. \*\*= added "literature review" to the search query, searched for articles in "Business, Management and Accounting", imited to articles since 2012. \*\*\*= searched for "organizational status" instead of "status"

## 8.3 Survey design and measures used

In order to test the hypothesis of this research, a questionnaire has been made. This questionnaire is not only made for this study, it will be used by more scholars. The questionnaire consists of five parts, regarding supplier satisfaction, preferred customer status, relational aspects, other influences and general information. The first two parts of the survey, regarding supplier satisfaction and preferred customer status, built on the researches done by Hüttinger et al. (2014)<sup>293</sup> and Vos et al. (2016)<sup>294</sup> and will provide extra information for this research. A replication of the model of Vos et al. (2016) can be found in Appendix B. The measures used for the supplier satisfaction and preferred customer status questions are conducted from that research of Vos et al. (2016). Both power measures, the use of coercive and the use of reward power, are adapted from the article of Pulles et al. (2014). The measures of both reward and coercive power consist of four questions each related to the respectively source of power.<sup>295</sup> The measure of conflict comes from the study of Kumar et al. (1992) and consists of three questions.<sup>296, 297</sup> In order to operationalise conflict resolution, the measure of Benton and Maloni (2005) is used. The

<sup>&</sup>lt;sup>293</sup> See Hüttinger et al. (2014)

<sup>&</sup>lt;sup>294</sup> See Vos et al. (2016)

<sup>&</sup>lt;sup>295</sup> See Pulles et al. (2014) p. 25

<sup>&</sup>lt;sup>296</sup> See Kumar, Stern, & Achrol (1992) p. 252

<sup>&</sup>lt;sup>297</sup> It can be discussed that the measure of conflict is actually a measure of 'level of relational conflict'. For readability purposes, further on in this thesis, there will be referred to 'conflict' while 'level of relational conflict' would even better fit the operationalisation.

measure of Benton and Maloni is adopted in its entirely and consists of three questions. <sup>298</sup> The operationalisation of status was more difficult, because it is not been used in the in the existing literature on an inter-organisation level in the same way as this research uses it. Therefore, the measurement of Torelli et al. (2014) was implemented. The questions originally were made for measuring the status of individuals, but are also suitable in this case. This measurement consist of five questions and includes for example aspects like admired by others and having a high prestige.<sup>299</sup> Four out of five questions are used, because two questions are very similar. All the measures used in this study are presented in Appendix C. All items are measured on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. In addition to the dependent and independent variables of this research, the survey includes also questions about characteristics of the supplier and relational characteristics, such as supplier size and the length of the relationship.

#### 8.4 Data collection and sample

The quantitative data for this study is collected in collaboration with the purchasing department of the University of Twente. The University of Twente has 6.679 suppliers, but not all these suppliers are suitable for this study. Only suppliers were the university has spent at least €10.000 in 2015 are included in this research. This threshold is used in order to eliminate the smaller suppliers from the sample who just sold to the university on one instance and did not build a relationship. Due to this threshold, there were 618 suppliers left. The purchasing department did not have a list with the contact details of all their suppliers, they only could provide a list with the contact details of 119 contracted suppliers. The contact details of the remaining 499 suppliers were found on the websites of them. Through this, the majority of e-mail addresses were in the form of info@companyX.com. Early July 2016, the questionnaire was sent via e-mail to these 618 suppliers. In the next weeks, three reminders were sent to the suppliers and the suppliers with known phone numbers and contact person were called to encourage participation. After about four weeks, 85 useable responses were collected. This gives a response rate of 13,8 percent. There is not an agreed norm for the response rate, however the common response rate usually fluctuates between 15% and 25%. 300 So the response rate of this research is a bit lower than average. The low response rate can be explained by several possible reasons. First, the absence of a contact person and by that a personal e-mail

<sup>&</sup>lt;sup>298</sup> See Benton & Maloni (2005) p. 8

<sup>&</sup>lt;sup>299</sup> See Torelli, Leslie, Stoner, & Puente (2014) p. 40 <sup>300</sup> See Vos et al. (2016) p. 4621

address for most of the suppliers. This is shown by the difference in response between the two groups: 38,2 percent of the suppliers with a personal e-mail address responded, while only 10,3 percent of the other group responded. Second, the period of data collection coincided with the summer holiday period. A third possible reason is the length of the survey. The estimated duration of the survey was thirty minutes and this probably has discouraged a lot of suppliers to fill it in. Since 85 responses is too low, there has been done a second round of data collection. The questionnaire was shortened and was sent after the holiday period, so that two potential reasons for a low response rate with the first round data collection were eliminated. This time the questionnaire was sent to 207 suppliers, which were also part of the first round but did not filled the questionnaire in that time. By this, nineteen additional responses were collected, what makes a total of 104 useable responses. Table 6 gives an overview of several characteristics of the respondents.

Table 6. Characteristics of sample

1. Lenght of relationship		2. Number of e	mployees	3. Region of respond		
< 5 years	23,1%	< 10	31,7%	Enschede	21,2%	
5 - 10 years	37,5%	10 - 50	26,9%	Twente	16,3%	
11 - 20 years	23,1%	51 - 250	24,0%	Overijssel	2,9%	
> 20 years	14,4%	251 - 1000	6,7%	Nederland	49,0%	
Not specified	1,9%	> 1000	8,7%	Europe	8,7%	
		Not specified	1,9%	Rest of the world	1,9%	
		4. Industry of res	ponde nt			
Primary sector (Basic in	dustry, e.g. minii	ng & farming)			1,0%	
Secundary sector (Indus	trial sector, e.g.	industry, energy-/wat	terutilities, const	ruction)	26,9%	
Tertiary sector (Service	sector, e.g. logis	stics, retail, cleaning, re	epair, insurance)	)	38,5%	
Quaternary sector (Infor	mation sector, e	.g. economic/tax cons	sultant, IT-servi	es, engineers, lawyers)	31,7%	
Unknown					1,9%	

A general concern for survey studies is the non-response bias, which relates to the difference between the answers of the respondents and from those who did not responded. Thereby, the collected answers do not represent the view of the whole sample, which is an important condition to be allowed to generalise the sample to the population.<sup>301</sup> Based on the assumption that the responses of late respondents represents the responses of nonrespondents, the answers of the first 25 percent respondents are compared to the last 25 percent respondents.<sup>302</sup> The means of their answers on all single questions used in this research are compared using an independent T-test. The results did not show any

<sup>&</sup>lt;sup>301</sup> See Armstrong & Overton (1977) p. 396) <sup>302</sup> See Pulles et al. (2016) p. 134

significant difference between the early and late respondents at p < 0.05 (see appendix D). Since the late respondents group consists of the seven last respondents of the first survey and the nineteen respondents of the second survey, also the first nineteen of the first questionnaire are compared with the respondents of the second questionnaire. This test shows one significant difference, only on the item 'Rewardpower4' the two groups scored significant differently. In addition, also the means of the revenue from the University of Twente of the respondents who did participate and who did not participate are compared based on the spend of the university of 2015. First, it was checked whether the revenue was normally distributed. This was not the case, since the skewness and kurtosis are not close to zero (respectively 5.81 and 37.95). For that reason, a nonparametric test was performed. This test found a significant difference between the average revenue of the two groups, the revenue of the suppliers who participated is significantly higher (see appendix E). Thereby, the non-response bias could have an impact on the results. This should be taken into account when generalising the results.

#### 8.5 Statistical method

The obtained data via the survey was empirically tested through Partial Least Squares (PLS) path modelling, using the SmartPLS 3.0 software of Ringle et al. (2015). 303 This statistical method allows to test whole models (in which a variable is both independent and dependent) consisting of cause-effect relationships with latent variables. This not possible with a regression, a regression only allows to test a model with one dependent variable. According to Henseler and Sarstedt (2013), there are four advantages of using the method PLS path modelling, what makes this method very popular among scientist and practitioners.<sup>304</sup> The first advantage is that PLS path modelling makes no assumptions about the tested population or scale of measurement<sup>305</sup>, which makes it can be used also when the distributions are highly skewed. 306 The second one is that this method of analysing can be used even when the sample size is small.<sup>307</sup> The reason for this is that PLS path modelling test the separate subparts of the model by ordinary least squares, so the complexity of the overall model will be barely influenced by a small sample size. 308 Further, the development of modern software with graphical user-interfaces and open

<sup>&</sup>lt;sup>303</sup> See Ringle, Wende, and Becker (2015)

<sup>&</sup>lt;sup>304</sup> See Fornell & Bookstein (1982) p. 443; Henseler and Sarstedt (2013), p. 566

<sup>305</sup> See Fornell and Bookstein (1982), p. 443; cited by Henseler and Sarstedt (2013), p. 566
306 See Bagozzi & Yi (1994; cited by Henseler and Sarstedt (2013), p. 566

<sup>&</sup>lt;sup>307</sup> See Chin and Newsted (1999), p. 314

<sup>&</sup>lt;sup>308</sup> See Fornell & Bookstein (1982) p. 443; Henseler and Sarstedt (2013), p. 566

packages of PLS path modelling has improved the use of the method. <sup>309</sup> And last, PLS path modelling is preferred over covariance-based SEM when the number of variables is high in relation to the number of observations and where the number of indicators per latent variable is low.<sup>310</sup> Besides that, non-normality of the sample does not affect the results when PLS path modelling with SmartPLS is used. Some additional descriptive statistics and analyses are done with IBM SPSS 22.311

### 8.6 Data structure quality assessment and model validity and reliability

First, a factor analysis is performed to control if the used items to measure a certain construct indeed measure the same. The factor loadings of the components were retained with a principal component analysis (PCA), as well as the unique variance of the items on their intended components.<sup>312</sup> The PCA is conducted with the default options for both Varimax and Oblique (Delta = 0) rotations. Based on the eigenvalue greater than 1, the PCA extracted the expected seven factors. The individual loadings need to be 0.55.313 Results show loadings of the items on the intended factors of higher than 0.55 for all of the Oblique solutions and Varimax solutions (see Appendix F), except for one conflict resolution item (ConflictResolution2). This item is placed in the same factor as the items of conflict. This mean that this item did not measure the same as the other items of conflict resolution and therefore this item is left out further analysis. The communalities for each individual item are all above 0.50, the factor averages are all above 0.60 and the total average is above 0.70. When the communalities are high, a factor analysis will be able to accurately recover factors. This is also the case when sample size is relatively small.<sup>314</sup>

The next step is to check the reliability and validity of the indicators and the latent factors. This is done in SmartPLS by running the model (bootstrapping 5000). The reliability of the indicators is assessed by the outer loadings of each individual indicator. According to Hulland (1999), the minimum loading of each indicator has to be 0.7 to accept the indicators. This mean that "there is more shared variance between the construct and its measure than error variance."<sup>315</sup> One indicator of reward power (RewardPower1) scores way too low, only 0.292. Therefore, this indicator is left out of this study. When this

<sup>&</sup>lt;sup>309</sup> See Fornell & Bookstein (1982) p. 443; Henseler and Sarstedt (2013), p. 566.

<sup>&</sup>lt;sup>310</sup> See Henseler and Sarstedt (2013), p. 566.

<sup>311</sup> See IBM-Corporation (2014

<sup>&</sup>lt;sup>312</sup> See Petter, Straub, and Rai (2007), p. 641

<sup>313</sup> See Tabachnick & Fidell (2007)

See MacCallum, Widaman, Preacher, and Hong (2001), p. 634 Hulland (1999), p. 198

indicator is left out, each indicator has a loading higher than 0.7, what means that the indicators can be considered as reliable as a measure for the respectively construct (see table 7). To assess the internal consistency of the constructs, composite reliability is used. This measure is suggested as a replacement for Cronbach's alpha, since Cronbach's alpha tends to provide conservative measures in PLS-SEM. 316 The values for composite reliability should be higher than 0.7 or higher than 0.6 if the research is exploratory.<sup>317</sup> Table 7 shows that the values for each construct is higher than the threshold, which indicates that the internal consistency of all constructs can be considered as reliable. The validity of the constructs has also to be assessed to ensure the constructs indeed measure what they intend to measure and thus are free from systematic measurement error. To evaluate the validity of the constructs in a good way, two subtypes of validity will be employed: the convergent validity and the discriminant validity. <sup>318</sup> The convergent validity examines if a factor is unidimensional, so that the measures of a construct are related. 319 The measure used to assess the convergent validity is the average variance extracted (AVE). An AVE higher than 0.5 is considered as acceptable, according to Bagozzi and Yi (1988). 320 Table 7 shows that the AVE for each construct is higher than 0.5, so all these values of AVE are high enough, using the threshold of Bagozzi and Yi(1988).

.

<sup>&</sup>lt;sup>316</sup> See Bagozzi & Yi (1988) p. 82; Hair, Sarstedt, Ringle, & Mena (2012) p. 423 Wong (2013) p. 22

<sup>&</sup>lt;sup>317</sup> See Bagozzi & Yi (1988) p. 82

See Sarstedt & Mooi (2014); cited by Henseler, Ringle, & Sarstedt (2015) p. 115

<sup>&</sup>lt;sup>319</sup> See Henseler, Hubona, & Ray (2016) p. 11

<sup>&</sup>lt;sup>320</sup> See Bagozzi & Yi (1988) p. 82

Table 7. Reliability and validity (1)

	Indicator	Outer loading	Composite reliability	Convergent Validity (AVE)		
	SupplierSatisfaction1	0.859				
	SupplierSatisfaction2	0.876		0.753		
Supplier satisfaction	SupplierSatisfaction3	0.867	0.939			
	SupplierSatisfaction4	0.880				
	SupplierSatisfaction5	0.858				
	Preferred Customer Status 1	0.860				
	PreferredCustomerStatus2	0.887				
Preferred customer status	PreferredCustomerStatus3	0.842	0.918	0.691		
	PreferredCustomerStatus4	0.789				
	PreferredCustomerStatus5	0.771				
	Conflict1	0.921				
Conflict	Conflict2	0.925	0.951	0.866		
	Conflict3	0.944				
Conflict Resolution	ConflictResolution1	0.787	0.870	0.772		
Commet Resolution	ConflictResolution3	0.962	0.870	0.772		
	Status1	0.892				
Status	Status2	0.906	0.962	0.863		
Status	Status3	0.955	0.902	0.803		
	Status4	0.962				
	RewardPower2	0.720				
Reward Power	RewardPower3	0.975	0.865	0.686		
	RewardPower4	0.767				
	CoercivePower1	0.764		0.731		
Coercive Power	CoercivePower2	0.919	0.915			
Coercive Power	CoercivePower3	0.877	0.913	0.731		
	CoercivePower4	0.853				

The discriminant validity assesses if the measure of a construct is statistically different from the measurements of the other constructs. 321 Multiple methods are used to assess the discriminant validity. The Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio of the correlations between the latent variables are used. The method of Fornell and Larcker (1981) assumes good discriminant validity when the square roots of AVE in each latent variable is higher than the correlation coefficients with the other constructs.<sup>322</sup> Table 8 shows that no correlation coefficient is higher than the square roots of AVE. The HTMTapproach is introduced by Henseler et al. (2015) after they showed that the traditional methods do not "reliably detect the lack of discriminant validity in common research situations."323 In order to assess discriminant validity, the HTMT ratio can be used in two ways: namely as criterion or as statistical test. 324 Both methods will be used. Using the HTMT ratio as a criteria, the value of it needs to be below a certain threshold. The literature suggest to use either 0.85 or 0.90 as the level of the threshold. 325 Table 9 shows

<sup>&</sup>lt;sup>321</sup> See Hair (2010)

See Fornell & Larcker (1981)

<sup>&</sup>lt;sup>323</sup> Henseler et al. (2015) p. 115

<sup>&</sup>lt;sup>324</sup> See Henseler et al. (2015) p. 121 <sup>325</sup> See Henseler et al. (2015) p. 121

the values of the HTMT ratio for all variables compared to each other (see bottom-left corner of the table). All scores are lower than the threshold (either 0.85 or 0.90), so this result support discriminant validity. The HTMT ratio can also be used as a statistical test to assess discriminant validity. Confidence intervals are created for the HTMT for each relation between two latent variables. This method assumes discriminant validity when the null hypothesis is accepted; H0: HTMT  $\geq$  1. This means that if the value '1' lies within the confidence interval, discriminant validity can not be guaranteed. But if the value '1' lies outside of this interval, the two variables are considered as empirically distinct.<sup>326</sup> The values of the confidence intervals are shown in table 9 (in the top-right corner), showing that none of the relations have a confidence interval including the value '1'. Also this method supports discriminant validity. Both convergent and discriminant validity are well established. Last, the model fit has to be assessed. This can be done by looking at the value of the standardised root mean square residual (SRMR). A cut-off value of 0.10 is seen as an adequate threshold to assess the model fit, although a score below 0.08 is seen as better.<sup>327</sup> The SRMR value of this model is 0.097, so model fit can be accepted.

 <sup>&</sup>lt;sup>326</sup> See Henseler et al. (2015), p. 122
 <sup>327</sup> See Henseler et al. (2014), cited by Vos et al. (2016) p. 4617

Table 8. Means, Standard Deviations, and Correlations of the Constructs

		M	SD	1	2	3	4	5	6	7
1	Coercive power	1.82	0.88	0.85	,					
2	Conflict	1.33	0.70	0.34	0.93					
3	Conflict resolution	3.14	1.10	-0.02	0.05	0.88				
4	Preferred customer status	3.19	0.85	-0.07	-0.15	0.01	0.83			
5	Reward power	1.98	0.88	0.67	0.15	-0.06	0.00	0.83		
6	Status	4.07	0.72	-0.26	-0.33	0.16	0.40	-0.12	0.93	
7	Supplier satisfaction	4.23	0.74	-0.34	-0.48	0.18	0.50	-0.20	0.54	0.87

M = mean; SD = standard deviation; bold elements on the diagonal represent the square roots of the AVE; off-diagonal elements are correlations between the constructs.

Table 9. Reliability and validity (2)

Construct	1	2	3	4	5	6	7	8	9	10
1 Coercive power	-	0.09-0.65	0.07-0.28	0.10-0.49	0.13-0.51	0.05-0.43	0.09-0.33	0.65-0.87	0.10-0.49	0.16-0.58
2 Conflict	0.38	-	0.06-0.31	0.03-0.76	0.19-0.79	0.11-0.65	0.06-0.50	0.07-0.41	0.05-0.65	0.19-0.79
3 Conflict resolution	0.08	0.08	-	0.01-0.54	0.02-0.28	0.03-0.29	0.08-0.32	0.06-0.34	0.06-0.41	0.10-0.41
4 Moderating effect conflict resolution	0.28	0.14	0.11	-	0.02-0.73	0.01-0.58	0.08-0.47	0.07-0.35	0.04-0.47	0.07-0.46
5 Moderating effect status (coercive power)	0.35	0.58	0.03	0.30	-	0.40-0.87	0.05-0.39	0.05-0.34	0.05-0.52	0.10-0.52
6 Moderating effect status (reward power)	0.22	0.44	0.10	0.15	0.74	-	0.04-0.32	0.04-0.30	0.03-0.45	0.06-0.40
7 Preferred customer status	0.12	0.17	0.12	0.28	0.20	0.08	-	0.11-0.32	0.25-0.60	0.38-0.71
8 Reward power	0.77	0.17	0.09	0.20	0.14	0.07	0.13	-	0.07-0.35	0.13-0.44
9 Status	0.29	0.35	0.19	0.26	0.31	0.23	0.44	0.13	-	0.38-0.73
10 Supplier satisfaction	0.38	0.53	0.21	0.24	0.30	0.10	0.55	0.22	0.58	-

Notes: bottomleft corner holds HTMT-scores for the relationship between the variables on both axes. Topright corner holds HTMT confidence intervals of the relations between variables of both axes.

#### 9. Results

#### 9.1 Results of the partial models

In order to get more insights into the relationships between the social variables and supplier satisfaction, as a first step the results are obtained for three different models. The first model tests the effects of both coercive and reward power on supplier satisfaction. The second model adds the relationship between conflict and supplier satisfaction. The third model includes the moderating effects of status between both power sources and supplier satisfaction and the moderating effect of conflict resolution between conflict and supplier satisfaction. By testing a moderating effect in SmartPLS 3.0, it is also necessary to include the direct effect of the moderator to the dependent variable. Therefore, also the direct effects of status and conflict resolution on supplier satisfaction are included. The most important outcomes of the PLS path model are the R<sup>2</sup> values of the endogenous (dependent) variables and the level and significance of the path coefficients. The R<sup>2</sup> indicates the proportion of variance explained in the endogenous latent variable by the explaining latent variables. R<sup>2</sup> values above 0.75, 0.50 and 0.25 can be considered as

<sup>&</sup>lt;sup>328</sup> See Hair, Ringle, & Sarstedt (2011) p. 147

substantial, moderate and weak, respectively. These outcomes of the partial models will be discussed. The results of these models can be found in table 10. In the first model, the effect of coercive power on supplier satisfaction is significant. The impact of reward power is on the other hand not significant. These two variables account for thirteen percent of the variance in supplier satisfaction (R<sup>2</sup> = 0.13). When adding the relationship between conflict and supplier satisfaction (model II), the impact of coercive power is weakened and no longer significant. In this model, only conflict has a significant effect on supplier satisfaction. The R<sup>2</sup> increases to 0.29 and can be considered as weak. In the third model, both the effects of coercive and reward power on supplier satisfaction reduce and are still not significant. The impact of conflict on supplier satisfaction even strengthens slightly and is again significant. Also the direct effect of both conflict resolution and status on supplier satisfaction are significant. Only the moderating effect of status between reward power and supplier satisfaction is significant. This is a negative effect, which means that the higher the status, the less effect reward power has on supplier satisfaction. In this model the R<sup>2</sup> has increased to 0.52, which is a moderate score.

Table 10. Results of the partial models

Independent variable	PLS (model I)	PLS (model II)	PLS (model III)
Power			
Coercive power	-0.294 (2.01)*	-0.129 (n.s.)	-0.054 (n.s)
Reward power	-0.090 (n.s.)	-0.120 (n.s.)	-0.041 (n.s.)
Atmosphere			
Conflict		-0.425 (2.79)**	-0.489 (4.22)**
Conflict resolution			0.177 (1.93)*
Status			0.313 (3.54)**
Moderating effects			
Status-Coercive power			0.040 (n.s.)
Status-Reward power			-0.280 (2.04)*
Conflict Resolution-Conflict			0.218 (n.s.)
$\mathbb{R}^2$	0.13	0.29	0.52
Path coefficients (t-value	(es) * p < 0.05, **	p < 0.01,  n.s. = nc	on significant.

#### 9.2 Results of the full model

In order to test the hypotheses of this study, the full model is calculated by SmartPLS 3.0. The model is bootstrapped with 5.000 subsamples and tested on a significance level of 0,05 with a one-tailed test type. This is done because the coefficient is expected to have a sign

(either positive or negative), as reflected in the hypotheses. 329 As already stated, the most important outcomes of the PLS path model are the R2 values of the endogenous (dependent) variables and the level and significance of the path coefficients. 330 In this model, supplier satisfaction, preferred customer status, conflict and conflict resolution are endogenous variables. Supplier satisfaction has a R<sup>2</sup> value of 0.523, which can be regarded as moderate. The R<sup>2</sup> value of preferred customer status is 0.280 and this value can be considered as weak. The R<sup>2</sup> values of conflict and conflict resolution are very low, especially the value of conflict resolution, respectively 0.119 and 0.003. Next, the path coefficients are evaluated on strength and significance. If a coefficient is significant, the hypothesised direction of a relationship is empirically supported<sup>331</sup> and this result can be generalised from sample to a population.<sup>332</sup> The path coefficients are presented in the model with results below (see figure 4) and in table 11. Both the relationships between coercive power and supplier satisfaction (H1: t=0.5320;  $\beta=-0.06$ ;  $f^2=0.004$ ) and reward power and supplier satisfaction (H2: t=0.243;  $\beta=-0.03$ ;  $f^2=0.001$ ) are not even close to a significance level with P-values above 0.5. Coercive power (H3: t= 2.610;  $\beta = 0.38$ ;  $f^2 =$ 0.093) is found to have a significant positive impact on conflict at an alpha-level of 0.01, while the negative influence of reward power (H4: t=0.446;  $\beta=-0.05$ ;  $t^2=0.002$ ) is not supported. Both coercive power (H5: t=0.229;  $\beta=0.03$ ;  $f^2=0.001$ ) and reward power (H6: t= 0.438;  $\beta$  = -0.07; f<sup>2</sup> = 0.003) are found to have no significant impact on conflict resolution. Hypothesis 7 (Conflict has a negative impact on supplier satisfaction) is supported at an alpha-level of 0.01 (H7: t=3.981;  $\beta=-0.50$ ;  $f^2=0.249$ ). There is not found any empirically evidence for the moderating effect of conflict resolution on this relationship (H8: t=1.201;  $\beta = 0.22$ ;  $f^2 = 0.081$ ), as well as for the moderating effect of status on the relationship between coercive power and supplier satisfaction (H9: t=0.222; β = 0.03;  $f^2$  = 0.001). On the other hand, the moderating effect of status on the relationship between reward power and supplier satisfaction is found to be significant (H10: t=1.952;  $\beta$ = -0.27;  $f^2 = 0.071$ ), although this effect is negative instead of positive as hypothesised. This is because the impact of reward power on supplier satisfaction is not positive as expected, but turns out to be negative. Next, the relationship between status and preferred customer status (H11: t=2.204;  $\beta=0.19$ ;  $f^2=0.035$ ) is significant at an alpha-level of 0.01. The same applies for the last hypothesis (H12: t=4.726;  $\beta=0.40$ ; t=0.160), the

<sup>&</sup>lt;sup>329</sup> See Kock (2015), p. 1

<sup>&</sup>lt;sup>330</sup> See Hair et al. (2011) p. 147

<sup>331</sup> See Hair et al. (2011) p. 147 332 See Henseler et al. (2016) p. 11

relationship between supplier satisfaction and preferred customer status is also supported at an alpha-level of 0.01. This is in line with the finding of Vos et al. (2016) and thus this relationship is successfully replicated. A full replication of their improved model can be found in appendix B. In addition, their model is extended with the variables and relationships of this research. The outcome of that model is shown in appendix G.

The effect of coercive power on supplier satisfaction is found to be no longer significant when conflict is included in the model. However, the effect of coercive power on conflict is significant, even as the effect of conflict on supplier satisfaction. Hence, it seems to be the case that conflict mediates the relationship between coercive power and supplier satisfaction. To check whether this mediation role of conflict between coercive power and supplier satisfaction is significant, a procedure that explicitly tests this effect is used. According to Rungtusanatham et al., this is a better procedure than the use of an implicit test (e.g. Sobel test). 333 Their suggestion is to make a percentile bootstrap confidence interval out of the bootstrapped sample.<sup>334</sup> The results show that indirect effect of coercive power on supplier satisfaction through level of conflict is significant (95% confidence interval of -0.40 to -0.04). Therefore, it can be concluded that conflict performs as a full mediator between coercive power and supplier satisfaction. When testing moderating effects in SmartPLS 3.0, it is necessary to also include the direct effect of the moderator in the model. Thereby, also the direct effects of status and conflict resolution on supplier satisfaction are tested. It is found that status has a significant effect on supplier satisfaction (t= 2.095;  $\beta$  = 0.17;  $f^2$  = 0.046). Also the relationship between conflict resolution and supplier satisfaction is significant (t= 2.078;  $\beta$  = 0.24;  $f^2$  = 0.096). These two relationships are significant at an alpha-level of 0.05.

-

<sup>333</sup> See Rungtusanatham, Miller, & Boyer (2014) p. 102

<sup>&</sup>lt;sup>334</sup> See Rungtusanatham et al. (2014) pp. 104-105

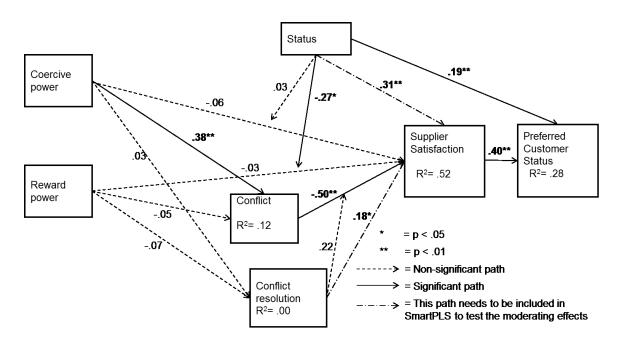


Figure 4. Results from PLS path modelling

Table 11. Bootstrap and effect statistic of the model (bootstrap samples = 5000)

	β	SE	t	f <sup>2</sup>
H1 Coercive Power -> Supplier Satisfaction	-0.059	0.112	0.530	0.004
H2 Reward Power -> Supplier Satisfaction	-0.030	0.122	0.243	0.001
H3 Coercive Power -> Conflict	0.378	0.145	2.610	0.093
H4 Reward Power -> Conflict	-0.054	0.121	0.446	0.002
H5 Coercive Power -> Conflict Resolution	0.031	0.135	0.229	0.001
H6 Reward Power -> Conflict Resolution	-0.068	0.155	0.438	0.003
H7 Conflict -> Supplier Satisfaction	-0.497	0.125	3.981	0.249
H8 Moderating Effect Conflict Resolution on Conflict-SS -> Supplier Satisfact	0.223	0.186	1.201	0.081
H9 Moderating Effect Status on CP-SS -> Supplier Satisfaction	0.029	0.133	0.222	0.001
H10 Moderating Effect Status on RP-SS -> Supplier Satisfaction	-0.268	0.137	1.952	0.071
H11 Status -> Preferred Customer Status	0.188	0.085	2.204	0.035
H12 Supplier Satisfaction -> Preferred Customer Status	0.403	0.085	4.726	0.160

Notes:  $\beta$  = standardised coefficient beta; SE = standard error of  $\beta$ ; t = t-statistic;  $f^2$  = effect seize of variance explained by predictor; \* = p < 0.05 (one sided); \*\* = p < 0.01 (one-sided).

# 10. Discussion and implications

# 10.1 Discussion of the results

The goal of this thesis is to explore the effects of the major sociological constructs on supplier satisfaction and preferred customer status. It is found that the use of coercive power does not have a direct significant effect on supplier satisfaction. However, it has a significant indirect effect on supplier satisfaction which conflict mediates. Since most other scholars already found a direct effect of coercive power on satisfaction, this finding is unexpected. But there are more studies that did not succeed in finding a significant

relationship between the use of coercive power and satisfaction. 335 This could indicate that the relationship between these two is influenced by a moderating variable. Kiyak et al. (2001) found that resistance moderates between coercive power and satisfaction, this could be the explanation for not finding a significant effect. 336 Another explanation could be that there is just no direct relationship between coercive power and supplier satisfaction. Coercive power could have only indirect effects on the level of satisfaction by a mediator, like conflict.

The results show that reward power does not affect supplier satisfaction or conflict significantly. This result is unexpected, since other scholars already found relationships between reward power and (supplier) satisfaction or conflict. But some studies also did not found a significant effect of the use of reward power on satisfaction. Again, this could indicate an influence of a moderating variable. It could also be the case that the use of reward power itself is not enough to produce satisfaction, but may strengthen the effects of other variables. Another possible reason is that the reward itself might not match the expectation of the supplier, what leads to less satisfaction.<sup>337</sup> According to Blau (1964), "Regular rewards create expectations that redefine the baseline". 338 Another possible explanation for the non-significant results of the use of reward power could be that the University of Twente can not reward its suppliers in most cases, since it has to comply to certain procurement rules and procedures.

There is also no significant effect found between both sources of power and conflict resolution. It might be that the past does not influence the way of resolving a conflict. So the use of power before a conflict does not influence the resolution of it, only when the use of power actually is used as a strategy to resolve a conflict it has an impact. Other scholars found that persuasive attempts to solve a conflict are more constructive than the use of coercive power. 339

This study found a significant relationship between conflict and supplier satisfaction. This is in line with other studies.<sup>340</sup> The main reason for this relationship is that a conflict has a negative impact on both the economic and social outcome. On the other hand, there is no

<sup>&</sup>lt;sup>335</sup> See Kiyak, Roath, & Schatzel (2001) p. 23; Rawwas, Vitell, & Barnes (1997) p. 57

<sup>336</sup> See Kiyak et al. (2001) p. 23

<sup>&</sup>lt;sup>337</sup> See Gaski & Nevin (1985) p. 138

<sup>&</sup>lt;sup>338</sup> Blau (1964) p. 117

<sup>339</sup> See Mohr & Spekman (1994) p. 139 340 See Gaski (1984); Jehn (1994) p. 223

evidence found for the moderating effect of conflict resolution on the relationship between conflict and supplier satisfaction. This is surprising, since several scholars already found that there are dysfunctional and functional conflicts.<sup>341</sup> A possible explanation for this result is that conflict resolution as a moderator is not a good measure for making this distinction. This assumption is supported by the results, which show a direct positive effect of conflict resolution on supplier satisfaction. The construct of conflict resolution has some similarities with functional conflict, while the measure of conflict could be explained as dysfunctional conflict. Since both have a significant effect on supplier satisfaction, the idea of two different kinds of conflicts is supported.

The moderating effect of status on the relationship between the usage of coercive power and supplier satisfaction is not supported. This is not in line with studies on interpersonal relationships, where interaction effects are found between status and power. It could be the case that this does not apply to the use of coercive power in inter-organisational relationships. Also the low usage of coercive power by the University could be an explanation. On the other hand, the moderating effect of status on the relationship between the use of reward power and supplier satisfaction is supported. This moderating effect is not positive as expected, the reason for this is that the effect of reward power in supplier satisfaction turns out to be negative instead of positive. This moderating effect means that the negative impact of the use of reward power on supplier satisfaction is smaller when the buyer has a higher status. This finding is in line with studies on interpersonal relationships which found that a higher status alleviates the negative effect of power. Having a high status is found to have a significant effect on becoming a preferred customer. This also indicates that when the buyer has a low status, it would be more difficult to receive a preferred customer status. An important reason for this is that a high-status actor can get greater effort from lower-status actors. The relationship between supplier satisfaction and preferred customer status is supported. This is in line with the results of the empirical study of Vos et al.(2016).<sup>342</sup>

#### **10.2** The implications

The practical implications of this research are twofold. First, the findings of this study prove again the positive impact of supplier satisfaction on becoming a preferred customer. This highlights the importance of satisfying the suppliers as a buyer, since it is an

<sup>&</sup>lt;sup>341</sup> See Jehn (1994); Amason (1996) <sup>342</sup> See Vos et al. (2016) p. 4618

important factor for gaining a competitive advantage due purchasing. Companies need to be aware of this and do their best to satisfy their strategic most important suppliers in order to receive a preferential treatment of them. Secondly, the findings show that social factors also play a role in supplier satisfaction and preferred customer status. This means that also a buyer who economically can not offer very much, still can satisfy its suppliers and become a preferred customer. This research found that high-status buying firms can benefit from their rank through increased satisfaction and a higher chance of becoming a preferred customer. This also means that low-status buying firms should try to increase their status to get the same benefits. Besides that, conflict impacts supplier satisfaction in different ways. A dysfunctional conflict has a negative influence on supplier satisfaction, while the impact of a functional conflict is positive. This indicates the importance of managing a conflict, in order to satisfy the suppliers a firm must ensure that a conflict will be functional. Hereby, the level of satisfaction of the supplier will be higher and the chance of becoming a preferred customer will be increased.

While the practical implications point out the interest of the findings of this research for firms, the theoretical implications refer to the impact on the literature. This study provides more data and insight in the concepts of supplier satisfaction and preferred customer status. It is found that conflict fully mediates the relationship between coercive power and supplier satisfaction. So, coercive power appears to reduce the level of satisfaction of suppliers only when it causes conflicts in the relationship. In contrast to past studies which studied only a direct link between coercive power and satisfaction, this research emphasised the need to explore the relationship between coercive power and satisfaction in more detail. Further, the research showed that the status of the buyer plays indeed a big role in buyer-supplier relationships. It is found that the buyer's status has a direct impact on supplier satisfaction and preferred customer status. Also it negatively moderates the negative effect of reward power on supplier satisfaction. Besides that, this study once again supports that conflict is a multidimensional construct, with a dysfunctional and a functional part. That makes it important to find the different effects of conflict and what ensures that a conflict becomes functional. Although most scholars already recognised conflict as a multidimensional construct, research on the different effects of dysfunctional and functional conflicts on inter-organisational relationships are limited. This is the first study that tested the effects of both types of conflict on supplier satisfaction as far as known. The results indicate that the two types have a different impact on the level of satisfaction of suppliers.

#### 11. Limitations and future research

#### 11.1 Limitations of this research

The first limitation is the low sample size. Although the sample size is above the general accepted threshold of one hundred, this number may still be too low to test a complicated model with this many relationships. Also generalising of the findings to the entire population is hard with this sample size. Besides that, also a non-response bias of unsatisfied suppliers can have an impact. Although the disclaimer of the questionnaire explicitly stated that the questionnaire could not be used as a marketing tool, it is possible that unsatisfied suppliers did not fill in the questionnaire. Besides this, it is also found that the revenue of the participated suppliers is significant higher than the revenue of the suppliers who did not fill in the questionnaire, what indicates a non-response bias. This calls for caution when generalising the results. Another limitation is that the questionnaire might not have fit the context of the research. The model and corresponding survey of Vos et al. (2016) was designed to suit for a production- or industry-setting, while in this study it is used in a mostly service-oriented organisation: an university. There were comments on the technical focus of the questionnaire, that some questions were not applicable to the certain supplier. Even though the main research model does not use variables which questions were 'unanswerable', the fact that suppliers deem the questionnaire not fitting might induce some bias to the rest of the questions. The third limitation is that the operationalisation of conflict resolution is not very good. Looking at the questions, they do not measure exactly conflict resolution. It is more focussed on the outcome of discussions. Finally, the research did not match the case entirely. It is found that the University of Twente did not use a lot of power, which is an important part of this research. The means and standard deviation of coercive power is 1.83 and 0.88 and reward power has a mean of 1.98 and a standard deviation of 0.88. A possible explanation for this is that a public institution has to follow predefined procedures and rules most of the time, which limit the possibilities to use power. Also the mean and standard deviation of conflict was very low, namely 1.33 and 0.70. The low usage of power and absence of conflicts is far from ideal for this research and does influence the overall results.

#### 11.2 Future research possibilities

This research found a new antecedent for both supplier satisfaction and preferred customer status. Especially the finding of the influence of status on preferred customer status is interesting, since only supplier satisfaction was found to have a significant impact. These findings encourages the search for more antecedents of both concepts. This could lead to generally accepted directives for satisfying suppliers and becoming a preferred customer. The findings of this study show that social concepts do have an impact on supplier satisfaction and preferred customer status. Therefore, other social construct are also possible drivers of supplier satisfaction and preferred customer status. Since the tested sources of power do not have a direct significant effect on supplier satisfaction, only a significant indirect effect of coercive power is found it would be interesting to study the effects of the other sources of power on supplier satisfaction.

It is found that conflict resolution does not moderate the relationship between conflict and supplier satisfaction. By that, it is not a good way of making a distinction between dysfunctional and functional conflicts. But since conflict resolution has a direct positive significant effect on supplier satisfaction, it is likely that dysfunctional and functional conflicts both exist and impact satisfaction in a different way. It would be interesting to study this in a model with dysfunctional conflict and functional conflict are both included as a own variable. A potential way to do this is to use task conflict as functional conflict and relationship conflict as dysfunctional conflict.<sup>343</sup> Original, these constructs are applied on interpersonal relationships. The measures are therefore made for this kind of relationship.<sup>344</sup> However, with a few adjustments this measure could also become applicable for inter-organisational relationship. For instance, Rose and Shoham (2004) used these two types of conflict in their study to inter-organisational conflicts.<sup>345</sup>

Since status is found to impact both supplier satisfaction and preferred customer status, it would be interesting to get more insights into the concept. At the moment, the understanding of organisational status is limited, and needs to be studied more. Especially, research to explore the antecedents of status is necessary.

Besides this, it would be interesting to not only measure the supplier satisfaction with the entire relationship, but also split the concept in a social and economic part. By doing so,

 <sup>&</sup>lt;sup>343</sup> See Jehn (1995) p. 258
 <sup>344</sup> See Jehn (1994)
 <sup>345</sup> See Rose & Shoham (2004) p. 946

the exact impact of variables on supplier satisfaction would become more clear. It will also provide more insight in the contribution of the social and economic part on the total satisfaction.

Another interesting possibility for future research is to study the relationship between supplier satisfaction and preferred customer status from the perspective of the suppliers. This will give more insights in how suppliers differentiate between buyers and what are important factors for them to award a preferred customer status. This can examine whether economic factors or social/relational factors are more important for a supplier. This makes it also possible to study the influence of status difference between buyers instead of only the status difference between buyer and supplier. This will show whether a firm also requires, next to a high status, a higher status than the other buyers to become a preferred customer.

#### **Bibliography**

- 1. Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1), 123-148.
- 2. Ambrose, E., Marshall, D., & Lynch, D. (2010). Buyer supplier perspectives on supply chain relationships. *International journal of operations & production management, 30*(12), 1269-1290.
- 3. Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *The Journal of Marketing*, 42-58.
- 4. Anicich, E. M., Fast, N. J., Halevy, N., & Galinsky, A. D. (2015). When the Bases of Social Hierarchy Collide: Power Without Status Drives Interpersonal Conflict. *Organization Science*, 27(1), 123-140.
- 5. Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, 396-402.
- 6. Assael, H. (1969). Constructive role of interorganizational conflict. *Administrative Science Quarterly*, 573-582.
- 7. Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- 8. Bagozzi, R. P., & Yi, Y. (1994). Advanced topics in structural equation models (pp. 1-52): Cambridge, MA: Blackwell Publishers.
- 9. Baxter, R. (2012). How can business buyers attract sellers' resources?: Empirical evidence for preferred customer treatment from suppliers. *Industrial Marketing Management*, 41(8), 1249-1258.
- 10. Bennett, E., & Neiland, A. (2002). The Management of Conflict in Tropical Fisheries-Literature Review.
- 11. Benton, W., & Maloni, M. (2005). The influence of power driven buyer/seller relationships on supply chain satisfaction. *Journal of Operations Management*, 23(1), 1-22.
- 12. Bew, R. (2007). The new customer of choice imperative: ensuring supply availability, productivity gains, and supplier innovation. Paper presented at the 92nd Annual International Supply Management Conference, Las Vegas.
- 13. Blau, P. M. (1964). Exchange and power in social life: Transaction Publishers.
- 14. Blazejewski, S., & Becker-Ritterspach, F. (2011). Conflict in headquarters-subsidiary relations: a critical literature review and new directions. *Political Power in the Multinational Corporation. The Role of Institutions, Interests and Identities, Cambridge University Press, Cambridge*, 139-190.
- 15. Bothner, M. S., Smith, E. B., & White, H. C. (2010). A Model of Robust Positions in Social Networks. *American Journal of Sociology*, 116(3), 943-992.
- 16. Brokaw, A. J., & Davisson, C. N. (1976). An explanation of the preferences of suppliers for buyers in a selected segment of the chemical industry.
- 17. Brown, J. R., & Frazier, G. L. (1978). The application of channel power: its effects and connotations. *Research frontiers in marketing: Dialogues and directions*, 260-270.
- 18. Brown, J. R., Lusch, R. F., & Nicholson, C. Y. (1995). Power and relationship commitment: their impact on marketing channel member performance. *Journal of Retailing*, 71(4), 363-392.
- 19. Carr, A. S., & Pearson, J. N. (1999). Strategically managed buyer–supplier relationships and performance outcomes. *Journal of Operations Management*, *17*(5), 497-519.
- 20. Castellucci, F., & Ertug, G. (2010). What's in it for them? Advantages of higher-status partners in exchange relationships. *Academy of Management Journal*, *53*(1), 149-166.
- 21. Chin, W. W., & Newsted, P. R. (1999). Structural equation modeling analysis with small samples using partial least squares. *Statistical strategies for small sample research*, 2, 307-342
- 22. Chung, J.-E., Sternquist, B., & Chen, Z. (2006). Retailer–buyer supplier relationships: The Japanese difference. *Journal of Retailing*, 82(4), 349-355.

- 23. Chung, S. A., Singh, H., & Lee, K. (2000). Complementarity, status similarity and social capital as drivers of alliance formation. *Strategic Management Journal*, 21(1), 1-22.
- 24. De Clercq, D., Thongpapanl, N., & Dimov, D. (2009). When good conflict gets better and bad conflict becomes worse: The role of social capital in the conflict–innovation relationship. *Journal of the Academy of Marketing Science*, *37*(3), 283-297.
- 25. del Bosque Rodríguez, I. R., Agudo, J. C., & Gutiérrez, H. S. M. (2006). Determinants of economic and social satisfaction in manufacturer–distributor relationships. *Industrial Marketing Management*, 35(6), 666-675.
- 26. Deutsch, M. (1969). Conflicts: Productive and destructive. Journal of social issues, 25(1), 7-42.
- 27. Dommermuth, W. P. (1976). Profiting from distribution conflicts. *Business Horizons*, 19(6), 4-13.
- 28. Duguid, M. M., Loyd, D. L., & Tolbert, P. S. (2012). The impact of categorical status, numeric representation, and work group prestige on preference for demographically similar others: A value threat approach. *Organization Science*, 23(2), 386-401.
- 29. Eatough, M. (2014). Leaders Can No Longer Afford to Downplay Procurement. Retrieved from https://hbr.org/2014/03/leaders-can-no-longer-afford-to-downplay-procurement
- 30. Ellis, S. C., Henke, J. W., & Kull, T. J. (2012). The effect of buyer behaviors on preferred customer status and access to supplier technological innovation: An empirical study of supplier perceptions. *Industrial Marketing Management*, 41(8), 1259-1269.
- 31. Ellram, L. M., & Carr, A. (1994). Strategic purchasing: a history and review of the literature. *International journal of purchasing and materials management, 30*(1), 9-19.
- 32. Emerson, R. M. (1962). Power-dependence relations. American sociological review, 31-41.
- 33. Ensley, M. D., Pearson, A. W., & Amason, A. C. (2002). Understanding the dynamics of new venture top management teams: cohesion, conflict, and new venture performance. *Journal of Business Venturing*, 17(4), 365-386.
- 34. Essig, M., & Amann, M. (2009). Supplier satisfaction: Conceptual basics and explorative findings. *Journal of Purchasing and Supply Management*, 15(2), 103-113.
- 35. Etgar, M. (1978). Selection of an effective channel control mix. *The Journal of Marketing*, 53-58
- 36. Fehr, E., Herz, H., & Wilkening, T. (2013). The lure of authority: Motivation and incentive effects of power. *The American Economic Review*, 103(4), 1325-1359.
- 37. Fink, C. F. (1968). Some conceptual difficulties in the theory of social conflict. *Journal of conflict resolution*, 412-460.
- 38. Foladare, I. S. (1969). A Clarification of "Ascribed Status" and "Achieved Status". *The Sociological Quarterly*, 10(1), 53-61.
- 39. Forker, L. B., & Stannack, P. (2000). Cooperation versus competition: do buyers and suppliers really see eye-to-eye? *European Journal of Purchasing & Supply Management*, 6(1), 31-40.
- 40. Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing research*, 440-452.
- 41. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.
- 42. Forsyth, D. R. (2009). Group dynamics: Cengage Learning.
- 43. Fragale, A. R., Overbeck, J. R., & Neale, M. A. (2011). Resources versus respect: Social judgments based on targets' power and status positions. *Journal of Experimental Social Psychology*, 47(4), 767-775.
- 44. Frazier, G. L., & Rody, R. C. (1991). The use of influence strategies in interfirm relationships in industrial product channels. *The Journal of Marketing*, 52-69.
- 45. Frazier, G. L., & Summers, J. O. (1986). Perceptions of interfirm power and its use within a franchise channel of distribution. *Journal of marketing research*, 169-176.
- 46. French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. *Classics of organization theory*, 311-320.
- 47. Gaski, J. F. (1984). The theory of power and conflict in channels of distribution. *The Journal of Marketing*, 9-29.

- 48. Gaski, J. F., & Nevin, J. R. (1985). The differential effects of exercised and unexercised power sources in a marketing channel. *Journal of marketing research*, 130-142.
- 49. Gassenheimer, J. B., & Ramsey, R. (1994). The impact of dependence on dealer satisfaction: A comparison of reseller-supplier relationships. *Journal of Retailing*, 70(3), 253-266.
- 50. Geyskens, I., & Steenkamp, J.-B. E. (2000). Economic and social satisfaction: measurement and relevance to marketing channel relationships. *Journal of Retailing*, 76(1), 11-32.
- 51. Geyskens, I., Steenkamp, J.-B. E., & Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships. *Journal of marketing research*, 223-238.
- 52. Ghijsen, P., Semeijn, J., & Ernstson, S. (2010). Supplier satisfaction and commitment: The role of influence strategies and supplier development. *Journal of Purchasing and Supply Management*, 16(1), 17-26.
- 53. Goldhamer, H., & Shils, E. A. (1939). Types of power and status. *American Journal of Sociology*, 171-182.
- 54. Gulati, R., & Sytch, M. (2007). Dependence asymmetry and joint dependence in interorganizational relationships: Effects of embeddedness on a manufacturer's performance in procurement relationships. *Administrative Science Quarterly*, 52(1), 32-69.
- 55. Hair, J. F. (2010). Multivariate data analysis: Pearson College Division.
- 56. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- 57. Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- 58. Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., . . Calantone, R. J. (2014). Common beliefs and reality about PLS comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 1094428114526928.
- 59. Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial management & data systems*, 116(1), 2-20.
- 60. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- 61. Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565-580.
- 62. Huang, Z., & Washington, M. (2015). Assimilation or Contrast? Status Inequality, Judgment of Product Quality, and Product Choices in Markets. *Organization Science*, 26(6), 1752-1768.
- 63. Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.
- 64. Hunt, K. A. (1996). The relationship between channel conflict and information processing. *Journal of Retailing*, 71(4), 417-436.
- 65. Hunt, S. D., & Davis, D. F. (2008). Grounding supply chain management in resource-advantage theory. *Journal of supply chain management*, 44(1), 10-21.
- 66. Hunt, S. D., & Nevin, J. R. (1974). Power in a channel of distribution: sources and consequences. *Journal of marketing research*, 186-193.
- 67. Hüttinger, L., Schiele, H., & Schröer, D. (2014). Exploring the antecedents of preferential customer treatment by suppliers: a mixed methods approach. *Supply Chain Management: An International Journal*, 19(5/6), 697-721.
- 68. Hüttinger, L., Schiele, H., & Veldman, J. (2012). The drivers of customer attractiveness, supplier satisfaction and preferred customer status: A literature review. *Industrial Marketing Management*, 41(8), 1194-1205.
- 69. IBM-Corporation. (2014). IBM SPSS Advanced Statistics, Version 22.0. Armonk, NY: IBM Corp.
- 70. Jehn, K. A. (1994). Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International journal of conflict management*, 5(3), 223-238.

- 71. Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 256-282.
- 72. Jensen, M., Kim, B. K., & Kim, H. (2011). The importance of status in markets: A market identity perspective. *Status in management and organizations*, 87-117.
- 73. Jensen, M., & Roy, A. (2008). Staging exchange partner choices: When do status and reputation matter? *Academy of Management Journal*, *51*(3), 495-516.
- 74. Johnsen, R. E., & Lacoste, S. (2016). An exploration of the 'dark side'associations of conflict, power and dependence in customer–supplier relationships. *Industrial Marketing Management*.
- 75. Johnson, J. L., Sakano, T., Cote, J. A., & Onzo, N. (1993). The exercise of interfirm power and its repercussions in US-Japanese channel relationships. *The Journal of Marketing*, 1-10.
- 76. Kasulis, J. J., Spekman, R. E., & Bagozzi, R. P. (1979). *A taxonomy of channel influences: a theoretical-operational framework.* Paper presented at the Future Directions of Marketing: Proceedings of Two European Colloquia, George Fisk et al., eds. Cambridge, MA: Marketing Science Institute.
- 77. Ke, W., Liu, H., Wei, K. K., Gu, J., & Chen, H. (2009). How do mediated and non-mediated power affect electronic supply chain management system adoption? The mediating effects of trust and institutional pressures. *Decision Support Systems*, 46(4), 839-851.
- 78. Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological review*, 110(2), 265.
- 79. Kim, P. H., Pinkley, R. L., & Fragale, A. R. (2005). Power dynamics in negotiation. *Academy of Management Review*, 30(4), 799-822.
- 80. Kipnis, D., & Schmidt, S. M. (1983). An influence perspective on bargaining within organizations. *Negotiating in organizations*, 303-319.
- 81. Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of applied psychology*, 65(4), 440.
- 82. Kiyak, T., Roath, A. S., & Schatzel, K. E. (2001). An examination of the coercive power-satisfaction relationship within a relational exchange: The moderating role of dealer resistance. *Journal of Marketing Channels*, 8(3-4), 3-27.
- 83. Kock, N. (2015). One-tailed or two-tailed P values in PLS-SEM? *International Journal of e-Collaboration (IJeC)*, 11(2), 1-7.
- 84. Koufteros, X., Vickery, S. K., & Dröge, C. (2012). The effects of strategic supplier selection on buyer competitive performance in matched domains: does supplier integration mediate the relationships? *Journal of supply chain management*, 48(2), 93-115.
- 85. Kumar, N. (1996). The power of trust in manufacturer-retailer relationships. *Harvard business review*, 74(6), 92-&.
- 86. Kumar, N., Stern, L. W., & Achrol, R. S. (1992). Assessing reseller performance from the perspective of the supplier. *Journal of marketing research*, 29(2), 238.
- 87. Lawler, E. J., Ford, R. S., & Blegen, M. A. (1988). Coercive capability in conflict: A test of bilateral deterrence versus conflict spiral theory. *Social Psychology Quarterly*, 93-107.
- 88. Lee, D. Y. (2001). Power, conflict and satisfaction in IJV supplier—Chinese distributor channels. *Journal of Business Research*, *52*(2), 149-160.
- 89. Leeders, M., Johnson, P., Flynn, A., & Fearon, H. (2006). Purchasing and supply management with 50 supply chain cases: New York: McGraw-Hill.
- 90. Leenders, M. R., & Blenkhorn, D. L. (1988). *Reverse marketing: The new buyer-supplier relationship*: New York: Free Press; London: Collier Macmillan.
- 91. Linton, R. (1936). The study of man: an introduction.
- 92. Lorentz, H., Shi, Y., Hilmola, O.-P., Singh Srai, J., Sperandio Milan, G., Dorion, E., & da Rosa Matos, J. A. (2012). Distribution channel conflict management: A Brazilian experience. *Benchmarking: An International Journal*, 19(1), 32-51.
- 93. Low, W.-S., Lee, J.-D., & Cheng, S.-M. (2013). The link between customer satisfaction and price sensitivity: An investigation of retailing industry in Taiwan. *Journal of Retailing and Consumer Services*, 20(1), 1-10.
- 94. Lukes, S. (1986). Power: NYU Press.

- 95. Lusch, R. F. (1976). Sources of power: their impact on intrachannel conflict. *Journal of marketing research*, 382-390.
- 96. MacCallum, R. C., Widaman, K. F., Preacher, K. J., & Hong, S. (2001). Sample size in factor analysis: The role of model error. *Multivariate Behavioral Research*, *36*(4), 611-637.
- 97. Mack, R. W., & Snyder, R. C. (1957). The analysis of social conflict--toward an overview and synthesis. *Conflict Resolution*, *1*(2), 212-248.
- 98. Magee, J. C., & Galinsky, A. D. (2008). 8 Social Hierarchy: The Self-Reinforcing Nature of Power and Status. *The Academy of Management Annals*, 2(1), 351-398.
- 99. Maloni, M., & Benton, W. C. (2000). Power influences in the supply chain. *Journal of Business Logistics*, 21(1), 49-74.
- 100. Malter, D. (2011a). High-status affiliations, identity creation, and rank mobility. *Robert H. Smith School Research Paper Series*.
- 101. Malter, D. (2011b). On the causality, cause, and consequence of returns to organizational status: Evidence from the grands crus classés of the Médoc. *Robert H. Smith School Research Paper Series*.
- 102. March, J. G., & Simon, H. A. (1958). Organizations.
- 103. Maunu, S. (2003). Supplier satisfaction: The concept and a measurement system; a study to define the supplier satisfaction elements and usage as a management tool. (Doctoral Dissertation), University of Oulu, Oulu. Retrieved from <a href="http://jultika.oulu.fi/Record/isbn951-42-7168-8">http://jultika.oulu.fi/Record/isbn951-42-7168-8</a>
- 104. McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual review of sociology*, 415-444.
- 105. Meena, P. L., & Sarmah, S. (2012). Development of a supplier satisfaction index model. Industrial Management & Data Systems, 112(8), 1236-1254.
- 106. Mohd Noor, N. A., Perumal, S., & Goaill, M. M. (2015). The Impact of Relational Marketing Bonds on Retailers' Economic and Social Satisfaction. *Journal of Relationship Marketing*, 14(2), 124-151.
- 107. Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal*, *15*(2), 135-152.
- 108. Moody, P. E. (1992). Customer supplier integration: Why being an excellent customer counts. *Business horizons*, *35*(4), 52-57.
- 109. Nollet, J., Rebolledo, C., & Popel, V. (2012). Becoming a preferred customer one step at a time. *Industrial Marketing Management*, 41(8), 1186-1193.
- 110. Nyaga, G. N., Lynch, D. F., Marshall, D., & Ambrose, E. (2013). Power asymmetry, adaptation and collaboration in dyadic relationships involving a powerful partner. *Journal of supply chain management*, 49(3), 42-65.
- 111. Nyaga, G. N., Whipple, J. M., & Lynch, D. F. (2010). Examining supply chain relationships: do buyer and supplier perspectives on collaborative relationships differ? *Journal of Operations Management*, 28(2), 101-114.
- 112. O'Brien, J., Dietz, J., & Pearce, J. (2011). Maintaining but also changing hierarchies: What social dominance theory has to say. *Status in management and organizations*, 55-84.
- 113. Patterson, K. D., Cavazos, D. E., & Washington, M. (2014). It does matter how you get to the top: Differentiating status from reputation. *Administrative Sciences*, 4(2), 73-86.
- 114. Pearce, J. L. (2011). Introduction: the power of status. *Status in management and organizations*, 1-22.
- 115. Perrow, C. (1961). Organizational prestige: Some functions and dysfunctions. *American Journal of Sociology*, 335-341.
- 116. Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *Mis Quarterly*, 623-656.
- 117. Piazza, A., & Castellucci, F. (2014). Status in organization and management theory. *Journal of Management*, 40(1), 287-315.
- 118. Podolny, J. (2005). Status signals: A sociological theory of market competition: Princeton, NJ: Princeton University Press.

- 119. Podolny, J. M. (1993). A status-based model of market competition. *American Journal of Sociology*, 829-872.
- 120. Podolny, J. M. (2001). Networks as the Pipes and Prisms of the Market1. *American Journal of Sociology*, 107(1), 33-60.
- 121. Podolny, J. M. (2010). *Status signals: A sociological study of market competition*: Princeton University Press.
- 122. Podolny, J. M., & Phillips, D. J. (1996). The dynamics of organizational status. *Industrial and Corporate Change*, *5*(2), 453-471.
- 123. Pollock, T. G., Chen, G., Jackson, E. M., & Hambrick, D. C. (2010). How much prestige is enough? Assessing the value of multiple types of high-status affiliates for young firms. *Journal of Business Venturing*, 25(1), 6-23.
- 124. Pondy, L. R. (1967). Organizational conflict: Concepts and models. *Administrative Science Quarterly*, 296-320.
- 125. Proxima. (2013). A global study of cost externalization and its implications on profitability.

  Retrieved from
- 126. Pruitt, D., & Rubin, J. (1986). Social conflict: Escalation, impasse, and resolution. *Reding, MA: Addision-Wesley*.
- 127. Pulles, N. J., Schiele, H., Veldman, J., & Hüttinger, L. (2016). The impact of customer attractiveness and supplier satisfaction on becoming a preferred customer. *Industrial Marketing Management*, *54*, 129-140.
- 128. Pulles, N. J., Veldman, J., Schiele, H., & Sierksma, H. (2014). Pressure or pamper? The effects of power and trust dimensions on supplier resource allocation. *Journal of supply chain management*, 50(3), 16-36.
- 129. Rahim, M. A. (2001). Managing conflict in organizations: Transaction Publishers.
- 130. Ramaseshan, B., Yip, L. S., & Pae, J. H. (2006). Power, satisfaction, and relationship commitment in Chinese store–tenant relationship and their impact on performance. *Journal of Retailing*, 82(1), 63-70.
- 131. Raven, B. (1965). Social influence and social power. *Current studies in social psychology. New York: Holt, Rinehart, and Winston.*
- 132. Raven, B. H. (2008). The bases of power and the power/interaction model of interpersonal influence. *Analyses of Social Issues and Public Policy*, 8(1), 1-22.
- 133. Rawwas, M. Y., Vitell, S. J., & Barnes, J. H. (1997). Management of conflict using individual power sources: A retailers' perspective. *Journal of Business Research*, 40(1), 49-64.
- 134. Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3: Bönnigstedt: SmartPLS. Retrieved from <a href="http://www.smartpls.com">http://www.smartpls.com</a>
- 135. Rose, G. M., & Shoham, A. (2004). Interorganizational task and emotional conflict with international channels of distribution. *Journal of Business Research*, 57(9), 942-950.
- 136. Rose, G. M., Shoham, A., Neill, S., & Ruvio, A. (2007). Manufacturer perceptions of the consequences of task and emotional conflict within domestic channels of distribution. *Journal of Business Research*, 60(4), 296-304.
- 137. Rosenberg, L. J. (1974). A new approach to distribution conflict management. *Business Horizons*, 17(5), 67-74.
- 138. Rosenberg, L. J., & Stern, L. W. (1971). Conflict measurement in the distribution channel. *Journal of marketing research*, 437-442.
- 139. Rucker, D. D., & Galinsky, A. D. (2008). Desire to acquire: Powerlessness and compensatory consumption. *Journal of Consumer Research*, *35*(2), 257-267.
- 140. Rungtusanatham, M., Miller, J., & Boyer, K. (2014). Theorizing, testing, and concluding for mediation in SCM research: Tutorial and procedural recommendations. *Journal of Operations Management*, 32(3), 99-113.
- 141. Russell, B. (1938). Power: A new social analysis. London: Allen and Unwin.
- 142. Samaha, S. A., Palmatier, R. W., & Dant, R. P. (2011). Poisoning relationships: Perceived unfairness in channels of distribution. *Journal of marketing*, 75(3), 99-117.

- 143. Sanzo, M. a. J., Santos, M. a. L., Vázquez, R., & Álvarez, L. I. (2003). The effect of market orientation on buyer–seller relationship satisfaction. *Industrial Marketing Management*, 32(4), 327-345.
- 144. Sarstedt, M., & Mooi, E. (2014). A Concise Guide to Market Research. *The Process, Data, and.*
- 145. Scheer, L. K., & Stern, L. W. (1992). The effect of influence type and performance outcomes on attitude toward the influencer. *Journal of marketing research*, 128-142.
- 146. Schiele, H., Calvi, R., & Gibbert, M. (2012). Customer attractiveness, supplier satisfaction and preferred customer status: Introduction, definitions and an overarching framework. *Industrial Marketing Management*, 41(8), 1178-1185.
- 147. Schiele, H., Ellis, S. C., Eßig, M., Henke, J. W., & Kull, T. J. (2015). Managing supplier satisfaction: Social capital and resource dependence frameworks. *Australasian Marketing Journal (AMJ)*, 23(2), 132-138.
- 148. Schiele, H., Veldman, J., & Hüttinger, L. (2011). Supplier innovativeness and supplier pricing: The role of preferred customer status. *International Journal of Innovation Management*, 15(01), 1-27.
- 149. Schiele, H., Veldman, J., Hüttinger, L., & Pulles, N. (2012). Towards a social exchange theory perspective on preferred customership—concept and practice *Supply management research* (pp. 133-151): Springer.
- 150. Sell, J., Lovaglia, M. J., Mannix, E. A., Samuelson, C. D., & Wilson, R. K. (2004). Investigating conflict, power, and status within and among groups. *Small Group Research*, 35(1), 44-72.
- 151. Shafritz, J. M., Ott, J. S., & Jang, Y. S. (2015). Classics of organization theory: Cengage Learning.
- 152. Shervani, T. A., Frazier, G., & Challagalla, G. (2007). The moderating influence of firm market power on the transaction cost economics model: an empirical test in a forward channel integration context. *Strategic Management Journal*, 28(6), 635-652.
- 153. Shipilov, A. V., & Li, S. X. (2008). Can you have your cake and eat it too? Structural holes' influence on status accumulation and market performance in collaborative networks. *Administrative Science Quarterly*, 53(1), 73-108.
- 154. Shipilov, A. V., Li, S. X., & Greve, H. R. (2011). The prince and the pauper: Search and brokerage in the initiation of status-heterophilous ties. *Organization Science*, 22(6), 1418-1434.
- 155. Simmel, G. (1908). *Soziologie: untersuchungen über die formen der vergesellschaftung*: Duncker & Humblot.
- 156. Skarmeas, D. (2006). The role of functional conflict in international buyer–seller relationships: Implications for industrial exporters. *Industrial Marketing Management*, 35(5), 567-575.
- 157. Skinner, S. J., Gassenheimer, J. B., & Kelley, S. W. (1992). Cooperation in supplier-dealer relations. *Journal of Retailing*, 68(2), 174.
- 158. Snyder, J. (2003). "Suppliers lose faith in GM as partner". Retrieved from <a href="https://www.highbeam.com/doc/1G1-111030457.html">www.highbeam.com/doc/1G1-111030457.html</a>
- 159. Spina, G., Caniato, F., Luzzini, D., & Ronchi, S. (2013). Past, present and future trends of purchasing and supply management: An extensive literature review. *Industrial Marketing Management*, 42(8), 1202-1212.
- 160. Steinle, C., & Schiele, H. (2008). Limits to global sourcing?: Strategic consequences of dependency on international suppliers: Cluster theory, resource-based view and case studies. *Journal of Purchasing and Supply Management, 14*(1), 3-14.
- 161. Sturm, R. E., & Antonakis, J. (2015). Interpersonal Power A Review, Critique, and Research Agenda. *Journal of Management*, 41(1), 136-163.
- 162. Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics, 5th. *Needham Height, MA: Allyn & Bacon*.
- 163. Takeishi, A. (2002). Knowledge partitioning in the interfirm division of labor: The case of automotive product development. *Organization Science*, *13*(3), 321-338.

- 164. Tan, K.-C., Kannan, V. R., Handfield, R. B., & Ghosh, S. (1999). Supply chain management: an empirical study of its impact on performance. *International journal of operations & production management*, 19(10), 1034-1052.
- 165. Terpend, R., & Ashenbaum, B. (2012). The intersection of power, trust and supplier network size: Implications for supplier performance. *Journal of supply chain management, 48*(3), 52-77.
- 166. Thomas, K. (1992). Conflict and negotiation processes in organizations. MD Dunnette & L. M. Hough (Ed.), Handbook of industrial and organizational psychology, Vol. 3: 651–717. Palo Alto: CA: Consulting Psychologists Press, Inc.
- 167. Thompson, L., & Thompson, L. (1998). Relationships and emotion: Building rapport (pp. 168-192): Upper Saddle River, NJ: Prentice Hall.
- 168. Tjosvold, D. (1997). Conflict within interdependence: Its value for productivity and individuality. *Using conflict in organizations*, 23-37.
- 169. Torelli, C. J., Leslie, L. M., Stoner, J. L., & Puente, R. (2014). Cultural determinants of status: Implications for workplace evaluations and behaviors. *Organizational Behavior and Human Decision Processes*, 123(1), 34-48.
- 170. Ulaga, W., & Eggert, A. (2006). Value-based differentiation in business relationships: Gaining and sustaining key supplier status. *Journal of marketing*, 70(1), 119-136.
- 171. Vos, F. G., Schiele, H., & Hüttinger, L. (2016). Supplier satisfaction: Explanation and out-of-sample prediction. *Journal of Business Research*, 4613–4623.
- 172. Washington, M., & Zajac, E. J. (2005). Status evolution and competition: Theory and evidence. *Academy of Management Journal*, 48(2), 282-296.
- 173. Webb, K. L., & Hogan, J. E. (2002). Hybrid channel conflict: causes and effects on channel performance. *Journal of Business & Industrial Marketing*, 17(5), 338-356.
- 174. Weber, M. (1947). The theory of economic and social organization. *Trans. AM Henderson and Talcott Parsons. New York: Oxford University Press*.
- 175. Welch, C., & Wilkinson, I. (2005). Network perspectives on interfirm conflict: reassessing a critical case in international business. *Journal of Business Research*, 58(2), 205-213.
- 176. Whipple, J. M., Frankel, R., & Daugherty, P. J. (2002). Information support for alliances: performance implications. *Journal of Business Logistics*, 23(2), 67-82.
- 177. Williamson, O. E. (1985). The economic institutions of capitalism: Firms, markets, relational contracting.
- 178. Williamson, P. J. (1991). Supplier strategy and customer responsiveness: Managing the links. *Business Strategy Review*, *2*(2), 75-90.
- 179. Wong, A. (2000). Integrating supplier satisfaction with customer satisfaction. *Total Quality Management*, 11(4-6), 427-432.
- 180. Wong, K. K.-K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- 181. Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of applied psychology*, 77(4), 525.
- 182. Zhao, X., Huo, B., Flynn, B. B., & Yeung, J. H. Y. (2008). The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. *Journal of Operations Management*, 26(3), 368-388.
- 183. Zhuang, G., Xi, Y., & Tsang, A. S. (2010). Power, conflict, and cooperation: The impact of guanxi in Chinese marketing channels. *Industrial Marketing Management*, 39(1), 137-149.

#### Annexures

Appendix A – IPSERA 2017 paper

### Conflict, Power & Status Influencing Supplier Satisfaction

- IPSERA 2017: Competitive paper -

Robbin van der Lelij University of Twente, PO Box 217, 7500 AE Enschede r.vanderlelij@student.utwente.nl, fax +31 53 489 2159

Frederik G. S. Vos Corresponding author; University of Twente, PO Box 217, 7500 AE Enschede f.g.s.vos@utwente.nl, phone +31 53 489 5532, fax +31 53 489 2159

Holger Schiele University of Twente, PO Box 217, 7500 AE Enschede h.schiele@utwente.nl, phone +31 53 489 5615, fax +31 53 489 2159

> Nick Praas University of Twente, PO Box 217, 7500 AE Enschede n.h.j.praas@student.utwente.nl, fax +31 53 489 2159

#### Abstract

Supplier satisfaction is seen as a necessary condition to receive preferred customer status from suppliers. This study examines the influence of three major social concepts (i.e. conflict, power and status) on supplier satisfaction. Data from 100 suppliers of a Dutch public organisation suggests that the use of coercive power has an indirect effect on supplier satisfaction, mediated by conflict. Also, higher buyer status increases the chance of having satisfied suppliers and decreases conflicts. Future research should further deepen our understanding of the impact of conflict on the relational atmosphere between buyers and suppliers and the role of status in this.

Keywords: supplier satisfaction; coercive power; conflict; status; buyer-supplier relationships.

#### **Conflict, Power & Status Influencing Supplier Satisfaction**

- Competitive paper -

#### **Abstract**

Supplier satisfaction is seen as a necessary condition to receive preferred customer status from suppliers. This study examines the influence of three major social concepts (i.e. conflict, power and status) on supplier satisfaction. Data from 100 suppliers of a Dutch public organisation suggests that the use of coercive power has an indirect effect on supplier satisfaction, mediated by conflict. Also, higher buyer status increases the chance of having satisfied suppliers and decreases conflicts. Future research should further deepen our understanding of the impact of conflict on the relational atmosphere between buyers and suppliers and the role of status in this.

Keywords: supplier satisfaction; coercive power; conflict; status; buyer-supplier relationships.

### Introduction: Conflict as an Important but mostly Neglected Concept in Supplier Satisfaction Research

Suppliers can help a firm to achieve competitive advantage by not only providing resources like raw materials and semi-finished products, but also ideas, knowledge and capabilities which a firm can not get elsewhere (Koufteros et al., 2012). Obviously it is possible that competitors try to get the same resources at the same supplier (Takeishi, 2002). Hence, it is important that firms are capable of getting better resources from their suppliers than their rivals to get competitive advantages (Hunt and Davis, 2008). The fact that some buyers get better resources than their competitors means that the allocation of resources to buying firms is a selective process (Pulles et al., 2016). The management of the relationship between a buyer and its suppliers is key to the success of the supply chain (Ambrose et al., 2010) and thus impacts the performance of a firm (Tan et al., 1999). This should be an incentive for buying firms to manage their relationships with their suppliers in the best way possible. When buyers fail to manage their relationships successfully, unsatisfied suppliers will probably not doing their best to help the buying company or supply products of less quality, what leads to a lower quality of the buyer's products. Several researchers emphasised that it is important to have satisfied suppliers (Essig and Amann, 2009; Meena and Sarmah, 2012). Hence, supplier satisfaction directly links to value creation (Vos et al., 2016).

Supplier satisfaction is defined as "a condition that is achieved if the quality of outcomes from a buyer-supplier relationship meets or exceeds the supplier's expectations" (Schiele et al., 2012, p. 1181). Antecedents increasing supplier satisfaction have been extensively researched, such as growth opportunities, profitability, relational behaviour and operative excellence of the buyer, but antecedents that have a negative annotation, such as conflict in the relationship, remain largely neglected by scholars. Even though other organisational research emphasised the strong impact of conflict on relational atmosphere and cooperation (Euwema et al., 2003; Vaaland, 2004), the role of conflict in buyer-supplier relationships has not gotten sufficient attention by past supplier satisfaction research. Accordingly, it is particular unknown which role the buyer's

use of coercive power as well as its status play in combination with conflict in the decrease of supplier satisfaction. This research is a first step into a new stream of buyer-supplier conflict research. Determining not only how conflicts influence supplier satisfaction, but also identifying the influence of its antecedents.

## How is supplier satisfaction influenced by the conflict level in a buyer-supplier relationship and its antecedent's status and coercive power?

On the one hand, this study contributes to theory by analysing what the role of conflict level is in bridging between buyer's use of coercive power and supplier satisfaction. Past research already showed that coercive power and conflict apart can be detrimental to the quality of a relationship (Brown et al., 1995; Gaski and Nevin, 1985; Geyskens et al., 1999; Lusch, 1976), but the role of conflict induced by the use of coercive power has not been researched. As will be outlined in detail in the next sections, conflict and coercive power follow slightly different logics. Whereas conflicts are stemming from opposing interests of the buyer and supplier, coercive power is a one-sided focus on value appropriation of one party at the expenses of the other party, in this case of the supplier. On the other hand, this research assesses the role of the buyer's status on conflict in the relationship and the satisfaction of suppliers. Status is a concept in psychology and strategic management that has recently received intensive attention by scholars and has been argued to influence a plenitude of individual and corporate-level perceptions of relational aspects (Anicich et al., 2015; Piazza and Castellucci, 2014; Shipilov and Li, 2008; Shipilov et al., 2011). Because of its apparent influence on relational benefits, we apply the concept in this research to buyer-supplier relationships. Hence, we add new insights to the study of inter-organisational status dynamics and how they influence relational aspects, such as conflict and satisfaction. From a practical perspective, this research identifies whether the negative effects of the use of coercive power and relational conflict on supplier satisfaction can be alleviated by the effects of status on these constructs. To achieve this, the next sections will introduce the concepts of conflict, coercive power and status and their link to supplier satisfaction. This is followed by a detailed explanation of the sampling procedure and statistical methods used to analyse these relationships. Afterwards the results of the analysis are presented, followed by the discussion and future research agenda to conclude the paper.

#### A Higher Level of Conflict in a Relationship Reduces Supplier Satisfaction

According to Thompson and Thompson (1998), "conflict is the perception of differences of interests among people" (Thompson and Thompson, 1998, p. 4). So, conflicts can appear when two or more social entities (i.e., individuals, groups, organisations and nations) have contact with each other in order to achieve their own objectives (Rahim, 2001). Conflict has been studied by scholars from different disciplines, like philosophy, sociology, economics, political science, anthropology, and psychology (Bennett and Neiland, 2002; Rahim, 2001). Each discipline sees the term conflict slightly different. The basic view of sociologists is that conflict can be seen as a function of social structure (Bennett and Neiland, 2002). For instance, from the viewpoint of the classical sociologist Georg Simmel in 1908, "his general hypothesis was that a certain amount of conflict is as essential to the proper functioning of groups, as are stability and order" (Rahim, 2001, p. 5). However, later sociologists, such as Elton Mayo saw conflict merely as evil, which should be minimised or, even better, eliminated (Rahim, 2001). Furthermore, according to

political science, conflict is the outcome of power relations. For example, Marxist's and Gramscian's see class struggle as the main cause of conflicts (Bennett and Neiland, 2002). Economists view conflict as the result of rational decision making by an individual trying to maximise its own personal utility given that resources are scarce. Finally, in organisational sciences, Pondy (1967) observed that the different conceptualisations of conflict are focusing on different parts of conflict. Some definitions describe the antecedent conditions of conflicts, like scarcity of resources or policy differences. Other definitions are focusing on the affective or cognitive state of the individuals involved. Also, several definitions focus on the behaviour during a conflict, ranging from resistance to overt aggression (Pondy, 1967).

Nevertheless, despite the different viewpoints described before, there are not only differences in the definitions of conflict, since most scholars agree that conflict includes some opposition, tension or incompatibility (Blazejewski and Becker-Ritterspach, 2011). In line with this, a buyer–supplier conflict can be defined as a disagreement between buyer and supplier that appears because each party strives to achieve its own business goals (Samaha et al., 2011). Conflicts arise due the different interests of the two parties and have consequences for the relationship. For example, Rosenberg (1974) identified that conflicts lead to a decrease in efficiency in distribution and consequently to increased costs. Also, conflicts increase the resistance to resolve future conflicts, cause emotional disruption and can damage the relationship through subjectivity and distorted judgments. This is in line with other studies, which found direct links between conflict and relational atmosphere. Specifically, Jehn (1994) and Gaski (1984) reported that conflicts reduce intragroup as well as channel member's performance and satisfaction. Hence, literature suggests that conflict in buyer-supplier relationships might reduce the satisfaction of suppliers. Therefore we expect that:

#### H1: Conflict level in the relationship has a negative impact on supplier satisfaction.

Recently, there is attention in literature for the simultaneous effects of power and status on the conflict experienced in interpersonal relationships. For instanceAnicich et al. (2015) found that high power combined with low status is a direct source of interpersonal conflict and demeaning treatment. They emphasised that power and status are two key antecedents to conflicts. The idea of the simultaneous effects of power and status on conflict is based on the similarity of the two concepts: power and status are both sources of possible influence over others (Fragale et al., 2011; French et al., 1959). However, in contrast to power, status is given voluntarily by the other party and is not a deliberate action to appropriate value from a relationship. Hence, power is more of a property of the actor, while status is more of a property of co-actors and observers (Magee and Galinsky, 2008). Since both power and status have already been shown to have great influence on conflict on the interpersonal level, this research analyses the influence of power and status on the inter-organisational level.

#### A Buyer's Usage of Coercive Power Increases Conflict and Reduces Supplier Satisfaction

According to Russell (1938), power is a basic force in social relationships and therefore plays a huge role in all kind of interactions (Fehr et al., 2013; Rucker and Galinsky, 2008; Sturm and Antonakis, 2015). The definition of power varies in the different research fields, but most definitions have the same base, namely that the powerholder has the ability to influence or

control the behaviour of those with whom the powerholder is in contact with (Shervani et al., 2007) or as Sturm and Antonakis (2015) put it: "power is having the discretion and the means to asymmetrically enforce one's will over entities" (Sturm and Antonakis, 2015, p. 139).

Building on this conceptualisation, power within the context of a buyer-supplier relationship can be defined as the ability of the buying firm to influence or control the decisions and behaviour of the supplying firm (Pulles et al., 2014). Therefore, power is seen as the mechanism of one firm to induce desired actions of another firm, which can be done in different ways, in particular through the use of coercive power (Maloni and Benton, 2000; Pulles et al., 2014). Hence, in this research we look in particular into the effect of one particular form of power: coercive power. Coercive power refers to the ability of the powerholder to punish the target if it does not comply with the wishes of the powerholder (Kim et al., 2005; Maloni and Benton, 2000; Pulles et al., 2014; Terpend and Ashenbaum, 2012). Accordingly, coercive power is exhibited through threats which will be executed unless the other party performs the desired behaviour. Being exposed to coercive power as a supplier and by that to threats and/or punishment by the buyer, will often bring costs (Anderson and Narus, 1990) and reduces the value of the outcome of the relationship for the supplier (Scheer and Stern, 1992). This is unpleasant for the one over who power is wielding and leads to negative feelings (Skarmeas, 2006). Such negative feelings, which have emerged in the interaction between the two companies, can create a tense atmosphere. Correspondingly, Welch and Wilkinson (2005) argue that the use of coercive power is a source of conflict, since it leads to the target firm doing things against its will. This causes tension and frustration (Brown et al., 1995; Gaski and Nevin, 1985; Lusch, 1976). When this happens, disagreements are expected to be expressed frequently between supplier and buyer (Frazier and Rody, 1991). Additionally, when the target firm feels that it is being attacked due to coercive power regardless of its own behaviour, it is more likely to use power itself or revolt against the more powerful firm's domination (Lawler et al., 1988). This will increase the number of conflicts in the future. Accordingly, we expect that the use of coercive power of the buying firm leads to increased conflicts in the relationship with the supplier.

#### H2: The use of coercive power has a positive impact on conflict level in the relationship.

As explained before, coercive power is used as a tool to let another party do something the powerholder wants. It is almost always used for the powerholder's own win. The powerholder tries to appropriate more value for itself in the relationship, mostly at the expense of the other party (Gulati and Sytch, 2007; Johnson et al., 1993; Nyaga et al., 2013). When the target firm perceives it this way, it will express a higher level of dissatisfaction (Nyaga et al., 2013). This will lower the social outcome of the exchange relationship (Ramaseshan et al., 2006). Accordingly, a buyer's use of coercive power leads to a decrease in the economic value of the relationship for a supplier, what is an important part of the outcome of the relationship. Because satisfaction is the result of the comparison between the expectation and the realised outcome (Emerson, 1976), usage of coercive power probably leads to a lower levels of supplier satisfaction. Correspondingly, Geyskens et al. (1999) and Geyskens and Steenkamp (2000) found that firms that are exposed to coercive power do not want to be involved with the user of this power. Also, Brown et al. (1995) found in their study about power and relationship commitment that the use of coercive power leads to a negative attitude toward cooperation with the powerholder. Correspondingly, coercive power often leads to an unfair outcome, leading the target firm to seek ways to resist to the

powerholder (Kumar, 1996; Pulles et al., 2014). This explains why coercive power will probably have a negative effect on supplier satisfaction.

H3: The use of coercive power has a negative impact on supplier satisfaction.

After outlining the effect of power in the previous paragraphs, the next section will introduce the notion of status in buyer-supplier relationships and describe how status is related to conflict, supplier satisfaction and coercive power.

## Buyer Status Reduces Conflict, Increases Supplier Satisfaction and is Negatively Related to the Buyer's Usage of Coercive Power

The roots of status are in sociology research, which already used this concept in the 1930s. Having a high status is associated with terms like being respected, admired, regarded and prestige. A commonly used definition of status in sociology comes from Goldhamer and Shils (1939), they observed that: "men evaluate the objects, acts, and human attributes with which they come into contact. These evaluations may become systematised into a hierarchy of values [...] Such a judgment of rank made about either the total person or relatively stable segments of the person constitutes the social status of that person (for the individual making the judgment)" (Goldhamer and Shils, 1939, p. 179). In other words, it is the ranking of an entity into a hierarchy. Next to status of individuals, also organisational status exists. Organisational status has its purpose, Piazza and Castellucci (2014) classified three inter-related functions of status in their paper, namely: status as signal, as intangible asset and as mobile resource.

The first role of status, as a signal (mostly of quality), was mainly studied in the early research of status in organisational and strategic management literature. This view of status comes from the need to compensate (or avoid/deal with) uncertainties (Piazza and Castellucci, 2014). In this research stream, it was argued that "the greater market participants' uncertainty about the underlying quality of a producer and the producer's product, the more that market participants will rely on the producer's status to make inferences about that quality" (Podolny, 2005, p. 18). Hence, this role of status is similar to reputation. Although the concept of status has been developed since the introduction of it, this view of status remained popular among scholars for a long time. A recent example of a study to the signalling effect of status is the research of Pollock et al. (2010), who assessed the value of high-status affiliates for young, unproven firms. Their study was based on a sample of 257 initial public offerings (IPOs). They found a positive linear relationship between the amount of prestigious executives affiliated with newly launched IPOs and the valuation of those IPOs (Pollock et al., 2010). This makes clear that new firms, which do not have a clear defined position in the status hierarchy, can overcome uncertainty by exploiting affiliations with high-status companies to signal quality (Malter, 2011a, b).

Another way of seeing status is status being an intangible asset for the individual or organisation holding it. This view is broader than the view of status simply reduced to a signal of quality. Here, research often focused on the role of status of firms by forming alliances and the outcome of these alliances. For example, Shipilov and Li (2008) analysed the structural holes (when a firm maintain links with groups of otherwise disconnected partners) of investment banks in the United Kingdom. They found that status accumulation, the ability of firms to increase their status as a group (by forming cooperative relationships) has a positive impact on revenue generation

(Shipilov and Li, 2008). Viewed from this perspective, having a high status ensures positional advantages. Differences in status are the main focus of the empirical research on status as an intangible asset, studying the advantages of having status, the behaviour patterns that are created by the ascribed status hierarchies and the related difficulties for the low-status actors (Piazza and Castellucci, 2014).

Finally, status has also a function as a mobile resource (Piazza and Castellucci, 2014). Status can be transferred from one actor to another through a relationship between the two (Podolny, 2001). This highlights the social nature of the construct and makes a clear distinction between status and the economic concept of reputation (Podolny, 2010). Scholars suggest that when lowstatus actors benefit from the relationship with a higher-status actors, due an increase in their own status, the higher-status actor might get something in return for this (Podolny and Phillips, 1996). Castellucci and Ertug (2010) build on this idea with their research, by exploring the reasons for high-status companies to engage in relationships with low-status firms in the field of Formula 1 racing. They found that high-status firms can secure greater effort from low-status firms. This effect is bigger when the differences in status between the partners is also bigger. The results show that a lower-status actor can benefit from a higher-status actor in a relationship by an increase in its status, whereas the higher-status actor could receive a return for this process (Piazza and Castellucci, 2014). In line with this, Patterson et al. (2014) stated that most researchers agreed that status can lead to reciprocal benefits and Podolny (1993) indicated that "a higher status leads to lower transaction costs in forming syndicate and investor relations" (Podolny, 1993, p. 851). This is in line with Washington and Zajac (2005), who found that high status organisations receive benefits above and beyond what they would receive based upon their performance or quality.

When linking status to this research, it can be expected that having the possibility to receive additional relational benefits (i.e. status) from the buyer, might lead suppliers to comply more often with the wishes of a buyer, which reduces conflict in the relationship. Also, the supplier might want to maintain the relationship in the long-term with the high-status buyer to take maximum advantage of it, so the supplier might avoid conflicts with the buyer. As explained before, status is a mobile resource, which can be transferred from one party to another (Podolny, 2001). Hence, the buyer's status is the capacity of a buyer to offer benefits to the supplier that go beyond regular transactional benefits and can thus be considered attractive to the supplier. Accordingly, past research showed that status is positively related to the tendency of a party to provide the status-holder with higher performance and quality of products (Castellucci and Ertug, 2010) as well as the development of cooperative relationships (Piazza and Castellucci, 2014). The underlying reasoning for this is that the relational effort of the low-status firm compensates the negative consequences for the high-status firm to engage in a relationship (Castellucci and Ertug, 2010). Based on these findings, we expect the higher the status of a buyer, the more a supplier is motivated to work cooperatively together, which leads to reduced conflicts in the relationship.

#### H4: Buyer status has a negative impact on conflict level in the relationship.

The buyer's possibility to offer more benefits to another party, beyond purely transaction-related exchanges, has already been shown to increase the satisfaction of suppliers (Pulles et al., 2014). It can be expected that being in a relationship with a buyer with a higher status has a positive effect

on the own status of the supplier (Piazza and Castellucci, 2014). As explained before, the status of an actor can change over time, including transferring from one actor to another. In this context, status plays an important role in the formation and development of cooperative relationships with other companies (Piazza and Castellucci, 2014). In line with this, Nyaga et al. (2013) discovered that additional relational benefits are positively related to the supply chain partner's collaborative and adaptive behaviour. It is likely that status serves as additional social outcome and therefore increases the economic value of a relationship (Emerson, 1976). As such, it can be expected that suppliers are more satisfied with a relationship with a buyer with higher status, than with lower-status buyers.

H5: Buyer status has a positive impact on supplier satisfaction.

Finally, there is a likely negative relationship between buyer status and the buyer's use of coercive power. One function of status is that it helps market participants to assess attributes of a firm, such as quality of product, cooperativeness or innovative potential easily (Piazza and Castellucci, 2014). It is build-up by a firm's actions over time (Podolny, 2005) and the use of coercive power might endanger its creation. For example, Geyskens et al. (1999) and Geyskens and Steenkamp (2000) found that channel members that are exposed to coercive power do not want to be involved with the user of this power. A reasoning for this is that the use of coercive power reduces the value of the relationship as experienced by the other party, which is exposed to coercive power (Anderson and Narus, 1990; Scheer and Stern, 1992). As a result, the buyer's use of coercive power reduces the valuation of the relationship a supplier has. Hence, it is likely that coercive power impacts the buyer's status (as compared with other buyers) negatively. In line with this, Washington and Zajac (2005) found that high status organisations receive benefits above and beyond what they would receive based upon their performance or quality. Status has thus a positive influence on privileges and benefits. Since these privileges and the benefits attached to it are only accessible for a limited number of firms (Castellucci and Ertug, 2010), it is likely that high status buyers have less incentive to use coercive power, in particular because coercive power can endanger the relational atmosphere. Besides, status itself is also a source of being able to influence others, like power is (Fragale et al., 2011; French et al., 1959). So having a high status as a buyer ensures that it is more likely that suppliers comply with its wishes, what causes that the use of coercive power is less needed. Hence, we expect that the use of coercive power does not only have a negative influence on the buyer's status, but also that high status individuals tend to refrain from the use of coercive power, since they already get additional benefits and do not want to endanger these benefits.

H6: Coercive power has a negative relationship with buyer status.

After having outlined the hypotheses of this research in the previous sections, the next section describes the sampling and analyses procedures applied, followed by the findings of the analyses.

Methods: Responses of 100 Suppliers were Analysed with PLS Path Modelling

Data collection & Sampling: Data was gathered with support of a Dutch public company

The quantitative data for this study was collected in collaboration with the purchasing department of a company from the educational sector in the Netherlands. Out of 6.679 suppliers, only suppliers where the company has spent at least €10.000 in 2015 are included in this research. This threshold is used to eliminate the smaller suppliers from the sample who just sold to the focal company on one instance and did not build a relationship. Due to this threshold, there were 620 suppliers to contact. The questionnaire was sent via e-mail to these 620 suppliers begin of July 2016. In the next weeks, three reminders were sent to the suppliers and the suppliers with known phone numbers and contact person were called to encourage participation. After excluding cases which indicated to have no sufficient knowledge about the buyer to complete the questionnaire (N=4), 100 useable responses were gathered (16.12%). Detailed demographics of the sample are presented in Table 1.

**Table 1:** Demographics of the Sample

1. Lenght of rel	ationship	2. Number of er	mployees	3. Region of resp	ondent
< 5 years	23,0%	< 10	32,0%	Enschede	22,0%
5 - 10 years	36,0%	10 - 50	28,0%	Twente	15,0%
11 - 20 years	25,0%	51 - 250	23,0%	Overijssel	3,0%
> 20 years	15,0%	251 - 1000	7,0%	Nederland	49,0%
Not specified	Not specified 1,0%		9,0%	Europe	10,0%
		Not specified	1,0%	Rest of the world	1,0%
		4. Industry of re	espondent		
Primary sector (Ba	sic industry, e.g.	mining & farming)			1,0%
Secundary sector (	(Industrial sector,	e.g. industry, energy-	/waterutilities, co	nstruction)	27,0%
Tertiary sector (Se	rvice sector, e.g.	logistics, retail, cleaning	ng, repair, insuran	ce)	39,0%
Quaternary sector	(Information sect	or, e.g. economic/tax	consultant, IT-ser	vices, engineers, lawyers)	33,0%

#### Survey Design: All survey items were based on existing measures

The measures used for supplier satisfaction and preferred customer status questions are based on the research of Vos et al. (2016). The use of coercive power was adapted from the article of Pulles et al. (2014). The measure of conflict comes from the study of Kumar et al. (1992). For status, the measurement of Torelli et al. (2014) was implemented. This measurement normally consists of five questions, but four of these questions are used, because two questions were very similar. The questions originally were made for measuring the status of individuals, but were adjusted to this case. All items were measured on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The survey includes also questions about characteristics of the supplier and relational characteristics, such as supplier size and the length of the relationship.

# Statistical Methods & Data Assessment: PLS-PM is used for data analysis, factor loading, reliability, fit, discriminant and convergent validity are all satisfactory for testing hypotheses

The obtained data was empirically tested through Partial Least Squares (PLS) path modelling, using the SmartPLS 3.0 software of Ringle et al. (2015). PLS path modelling is preferred over covariance-based SEM when the number of variables is high in relation to the number of observations and where the number of indicators per latent variable is low (Henseler and

Sarstedt, 2013). Besides that, non-normality of the sample does not affect the results when PLS path modelling with SmartPLS is used. Some additional descriptive statistics and analyses are done with IBM SPSS 22 (IBM-Corporation, 2014).

For data assessment, first, a factor analysis is performed to control if the used items to measure a certain construct indeed measure it. The factor loadings of the components are retained with a principal component analysis (PCA) (Petter et al., 2007). The PCA is conducted in SPSS with the default options for both Varimax and Oblique (Delta = 0) rotations, the individual loadings need to be 0.55 (Tabachnick and Fidell, 2007). Results show loadings of the items on the intended factors of higher than 0.55 for all of the Oblique and Varimax solutions. The communalities for each individual item are all above 0.50, the factor averages are all above 0.60 and the total average is above 0.70. As long as communalities are high, on average, a factor analysis will accurately recover factors even when sample size is relatively small (MacCallum et al., 2001).

The next step is to check the reliability and validity of the indicators and the latent factors. This is done in SmartPLS by running the model (bootstrapping 5000). The reliability of the indicators is assessed by the outer loadings of each individual indicator. According to Hulland (1999), the minimum loading of each indicator has to be 0.7 to accept the indicators and this was achieved by the data.

**Table 2:** Descriptive Statistics and Correlations

Construct	M	SD	1	2	3	4
1 Supplier satisfaction	4,23	0,73	0,86			
2 Conflict level	1,33	0,71	-0,47*	0,93		
3 Status	1,84	0,89	-0,32*	0,33*	0,93	
4 Coercive Power	4,06	0,72	0,54*	-0,33*	-0,26*	0,88

M = mean; SD = standard deviation; \* = Correlation is significant; bold elements on the diagonal represent the square roots of the AVE; off-diagonal elements are correlations between the constructs.

To assess the internal consistency, AVEs for each construct appear higher than 0.5 and all composite reliabilities are above the threshold of .70. Concerning discriminant validity Table 2 shows that no correlation coefficient is higher than the square roots of AVE. Additionally, the HTMT-approach (Henseler et al., 2015) shows that all scores are lower than the threshold (either 0.85 or 0.90) and the values of the confidence intervals show that none of the relations have a HTMT confidence interval including the value '1'. Both convergent and discriminant validity are well established. Last, the model fit has to be assessed. This can be done by looking at the value of the standardised root mean square residual (SRMR). A cut-off value of 0.08 is seen as an adequate threshold to assess the model fit (Henseler et al., 2016). The SRMR value of this model is 0.058, so model fit is satisfactory.

Results: The Effects of the Buyer's Coercive Power Usage are Fully Mediated by Conflict Level, whereas the Buyer's Status has also a Direct Effect on Supplier Satisfaction

The results of the PLS-PM analysis are presented in Figure 1. Firstly, concerning hypothesis 1, it is found that the level of conflict in a relationship has a negative impact on supplier satisfaction (H1: t=2.27;  $\beta=-0.30$ ; t=0.13; t=0.13;

power has a positive impact on the level of conflict in a relationship, is supported (H2: t= 2.40;  $\beta$  = 0.27; f² = 0.08; p<0.05). Further, the data does not support the hypothesis that coercive power has a negative impact on supplier satisfaction (H3: t= 1.24;  $\beta$  = -0.13; f² = 0.02; p=n.s.). Concerning hypothesis 4, the findings support the assumption that the status of the buyer has a negative impact on the level of conflict in the relationship (H4: t= 1.83;  $\beta$  = -0.26; f² = 0.08; p<0.05). Hypothesis 5, that status of the buyer has a positive impact on supplier satisfaction, is also supported (H5: t= 3.74;  $\beta$  = 0.41; f² = 0.25; p<0.05). Finally hypothesis 6, which assumes that there is a negative relationship between the use of coercive power and the buyer status is supported by the results (H6: t= 2.39;  $\beta$  = -0.26; f² = 0.07; p<0.05).

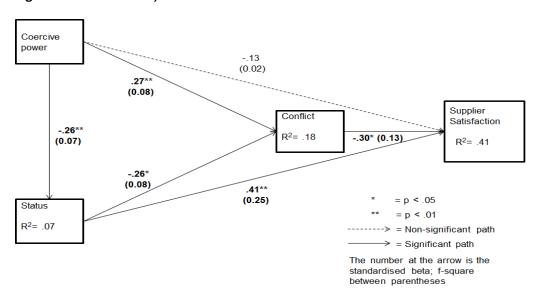


Figure 1: PLS-Path Analysis Results

In the tested model, the level of conflict mediates in the relationships between coercive power and supplier satisfaction and between buyer status and supplier satisfaction. To test whether these mediation effects are significant or not, a procedure that explicitly tests these effects is used instead of the use of an implicit test (e.g. Sobel test), as suggested by Rungtusanatham et al. (2014). Their suggestion is to make a percentile bootstrap confidence interval out of the bootstrapped sample. The results show that indirect effect of coercive power on supplier satisfaction through level of conflict is significant (95% Cl<sub>low</sub>= -0.25; 95% Cl<sub>high</sub>= -0.01; p<0.05), while the indirect effect of status on supplier satisfaction mediated by the level of conflict is not significant (95% Cl<sub>low</sub>= -0.01; 95% Cl<sub>high</sub>= 0.26; p=n.s.). Correspondingly, conflict serves as a full mediator between coercive power and supplier satisfaction, whereas conflict is only a partial mediator in the relationship between a buyer's status and supplier satisfaction.

# Discussion, Limitations and Future Research: Next to Level of Conflict in a Relationship, Buyer Status has a Strong influence on the Satisfaction of Suppliers

This paper aims to contribute to supplier satisfaction research by analysing what the role of conflict level is in bridging between the buyer's use of coercive power, status, and their outcome, supplier satisfaction. The findings show, firstly, that conflict has a negative influence on supplier

satisfaction. Which is unsurprisingly, since conflict is commonly associated with tensions which reduce relationship satisfaction and is therefore in line with previous research (Gaski, 1984; Jehn, 1994). Secondly, it is found that the use of coercive power does not have a direct significant effect on supplier satisfaction. Yet coercive power has a significant indirect effect on supplier satisfaction via the creation of conflict in a relationship. Since most other scholars already found a direct effect of coercive power on satisfaction, this finding is unexpected. Still, there are also other studies that did not succeed in finding a significant relationship between the use of coercive power and satisfaction (Kiyak et al., 2001; Rawwas et al., 1997). For example, Kiyak et al. (2001) found that resistance, a similar construct to conflict, moderates between coercive power and satisfaction. Accordingly, in combination with the findings of this study, this could mean that no direct relationship between coercive power and supplier satisfaction exists, but that this link is influenced by the degree to which it evokes conflicts or influences other relational variables. Finally, the inclusion of the buyer's status in this studies shows that status does not only increase a supplier's satisfaction and reduces the tendency to have conflicts in the relationship, but is negatively related to the use of coercive power. Hence, the buyer's status can mitigate the negative fall-out of using coercive power on the relational conflict level as well as increase the satisfaction of suppliers. These findings support the notion that status is an asset which can be used by a buying firm for its advantage. Nevertheless, our understanding of the concept of status is still limited and it needs more scrutiny from scholars in future studies, in particular to determine how it can be influenced. For now status, next to the use of coercive power, seems to be indeed a relevant construct in influencing relational aspects in buyer-supplier relationships, such as conflict and satisfaction.

Concerning the theoretical implications of this paper, even though conflict and coercive power follow slightly different logics, either stemming from opposing interests of the buyer and supplier or stemming from value appropriation of one party on the expenses of the other party, it appeared that the effect of coercive power on supplier satisfaction is fully mediated by conflict, whereas status has a direct influence. This means that coercive power appears to reduce supplier satisfaction only when it leads to conflict in the relationship. So, opposed to past studies who studied only a direct link, this research emphasised the need to analyse in more depth the relationship between coercive power and satisfaction. Moreover, the research showed that buyer status is indeed a very influential concept in buyer-supplier relationships. The exact mechanisms underlying the positive influence of status on supplier satisfaction and a reduced conflict level are still open for further investigation. This research showed that status might have the potential to mitigate conflict and lead to satisfaction. This adds to the recent research findings from strategic management and psychology, emphasising the importance of status as a relational construct (Anicich et al., 2015; Piazza and Castellucci, 2014).

From a practical perspective, this research found that the negative effects of the use of coercive power and the resulting relational conflict on supplier satisfaction can be alleviated by a buyer's status. Status does not only reduce the level of conflict in a relationship induced by negative influences such as coercive power, but also directly influences the satisfaction of suppliers with the relationship. Hence, building on the notion of status as a mobile resource, this research showed that high-status buying firms can benefit from their rank through increased satisfaction and the resulting increased benefits from a supplier, whereas low-status buying firms are advised

to increase their status to reap the same benefits. Nevertheless, the practical means to increase status have not yet been discovered and need to be studied in future.

The study has several limitations. Firstly the sample was moderate and is based on indirect procurement of a public company in the Netherlands. Generalising these findings to other populations than the one studied here has to be made with caution, so additional research in other contexts and for other product categories is needed. Secondly, the means and standard deviation of conflict in the sample are 1.33 and 0.71 respectively. Due to this low variance, we advise that the general measurement of conflict as used in this research might need to be further distinguished between dysfunctional and functional types conflict in future. A way of doing this is to use the concepts of task conflict and relationship conflict as outlined by the research of Jehn (1995) and Rose and Shoham (2004). Finally, as this research shows, buyer status has a negative influence on the use of coercive power, reduces conflict in the relationship and increases supplier satisfaction. However, we do not know yet what the antecedents and influencing factors of buyer status are. Consequently, future research should assess the antecedents of a firm's status and how status can be influenced over time.

#### References

Ambrose, E., Marshall, D., Lynch, D., 2010. Buyer supplier perspectives on supply chain relationships. International Journal of Operations & Production Management 30, 1269-1290.

Anderson, J., Narus, J., 1990. A model of distributor firm and manufacturer firm working partnerships. The Journal of Marketing 54, 42-58.

Anicich, E.M., Fast, N.J., Halevy, N., Galinsky, A.D., 2015. When the Bases of Social Hierarchy Collide: Power Without Status Drives Interpersonal Conflict. Organization Science 27, 123-140.

Bennett, E., Neiland, A., 2002. The Management of Conflict in Tropical Fisheries-Literature Review.

Blazejewski, S., Becker-Ritterspach, F., 2011. Conflict in headquarters-subsidiary relations: a critical literature review and new directions, In: Dörrenbächer, C., Geppert, M. (Eds.), Political Power in the Multinational Corporation. The Role of Institutions, Interests and Identities, Cambridge University Press, Cambridge. Cambridge University Press, New York, pp. 139-190.

Brown, J.R., Lusch, R.F., Nicholson, C.Y., 1995. Power and relationship commitment: their impact on marketing channel member performance. Journal of Retailing 71, 363-392.

Castellucci, F., Ertug, G., 2010. What's in it for them? Advantages of higher-status partners in exchange relationships. Academy of Management Journal 53, 149-166.

Emerson, R.M., 1976. Social-Exchange Theory. Annual review of sociology 2, 335-362.

Essig, M., Amann, M., 2009. Supplier satisfaction: Conceptual basics and explorative findings. Journal of Purchasing and Supply Management 15, 103-113.

Euwema, M.C., Van de Vliert, E., Bakker, A.B., 2003. Substantive and relational effectiveness of organizational conflict behavior. International journal of conflict management 14, 119-139.

Fehr, E., Herz, H., Wilkening, T., 2013. The lure of authority: Motivation and incentive effects of power. The American Economic Review 103, 1325-1359.

Fragale, A.R., Overbeck, J.R., Neale, M.A., 2011. Resources versus respect: Social judgments based on targets' power and status positions. Journal of experimental social psychology 47, 767-775.

Frazier, G.L., Rody, R.C., 1991. The use of influence strategies in interfirm relationships in industrial product channels. The Journal of Marketing 55, 52-69.

French, J.R.P., Raven, B., Cartwright, D., 1959. The bases of social power, In: Shafritz, J.M., Ott, J.S., Suk Jang, Y. (Eds.), Classics of organization theory. Cengage Learning, London, pp. 311-320.

Gaski, J.F., 1984. The theory of power and conflict in channels of distribution. The Journal of Marketing 48, 9-29.

Gaski, J.F., Nevin, J.R., 1985. The differential effects of exercised and unexercised power sources in a marketing channel. Journal of Marketing research 22, 130-142.

Geyskens, I., Steenkamp, J.-B.E., 2000. Economic and social satisfaction: measurement and relevance to marketing channel relationships. Journal of Retailing 76, 11-32.

Geyskens, I., Steenkamp, J.-B.E., Kumar, N., 1999. A meta-analysis of satisfaction in marketing channel relationships. Journal of Marketing research 36, 223-238.

Goldhamer, H., Shils, E.A., 1939. Types of power and status. American journal of sociology 45, 171-182.

Gulati, R., Sytch, M., 2007. Dependence asymmetry and joint dependence in interorganizational relationships: Effects of embeddedness on a manufacturer's performance in procurement relationships. Administrative science quarterly 52, 32-69.

Henseler, J., Hubona, G., Ray, P.A., 2016. Using PLS path modeling in new technology research: updated guidelines. Industrial Management & Data Systems 116, 2-20.

Henseler, J., Ringle, C.M., Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science 43, 1-21.

Henseler, J., Sarstedt, M., 2013. Goodness-of-fit indices for partial least squares path modeling. Computational Statistics 28, 565-580.

Hulland, J., 1999. Use of partial least squares (P L S) in strategic management research: A review of four recent studies. Strategic Management Journal 20, 195-204.

Hunt, S.D., Davis, D.F., 2008. Grounding supply chain management in resource-advantage theory. Journal of Supply Chain Management 44, 10-21.

IBM-Corporation, 2014. IBM SPSS Advanced Statistics, Version 22.0. IBM Corp, Armonk, NY.

Jehn, K.A., 1994. Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. International journal of conflict management 5, 223-238.

Jehn, K.A., 1995. A multimethod examination of the benefits and detriments of intragroup conflict. Administrative science quarterly 40, 256-282.

Johnson, J.L., Sakano, T., Cote, J.A., Onzo, N., 1993. The exercise of interfirm power and its repercussions in US-Japanese channel relationships. The Journal of Marketing 57, 1-10.

Kim, P.H., Pinkley, R.L., Fragale, A.R., 2005. Power dynamics in negotiation. Academy of Management Review 30, 799-822.

Kiyak, T., Roath, A.S., Schatzel, K.E., 2001. An examination of the coercive power-satisfaction relationship within a relational exchange: The moderating role of dealer resistance. Journal of Marketing Channels 8, 3-27.

Koufteros, X., Vickery, S.K., Dröge, C., 2012. The effects of strategic supplier selection on buyer competitive performance in matched domains: does supplier integration mediate the relationships? Journal of Supply Chain Management 48, 93-115.

Kumar, N., 1996. The power of trust in manufacturer-retailer relationships. Harvard Business Review 74, 92-106.

Kumar, N., Stern, L.W., Achrol, R.S., 1992. Assessing reseller performance from the perspective of the supplier. Journal of Marketing research 29, 238-253.

Lawler, E.J., Ford, R.S., Blegen, M.A., 1988. Coercive capability in conflict: A test of bilateral deterrence versus conflict spiral theory. Social Psychology Quarterly 51, 93-107.

Lusch, R.F., 1976. Sources of power: their impact on intrachannel conflict. Journal of Marketing research 13, 382-390.

MacCallum, R.C., Widaman, K.F., Preacher, K.J., Hong, S., 2001. Sample size in factor analysis: The role of model error. Multivariate Behavioral Research 36, 611-637.

Magee, J.C., Galinsky, A.D., 2008. 8 Social Hierarchy: The Self-Reinforcing Nature of Power and Status. The Academy of Management Annals 2, 351-398.

Maloni, M., Benton, W.C., 2000. Power influences in the supply chain. Journal of Business Logistics 21, 49-74.

Malter, D., 2011a. High-status affiliations, identity creation, and rank mobility. University of Maryland, Maryland.

Malter, D., 2011b. On the causality, cause, and consequence of returns to organizational status: Evidence from the grands crus classés of the Médoc. University of Maryland, Marylan.

Meena, P.L., Sarmah, S., 2012. Development of a supplier satisfaction index model. Industrial Management & Data Systems 112, 1236-1254.

Nyaga, G.N., Lynch, D.F., Marshall, D., Ambrose, E., 2013. Power asymmetry, adaptation and collaboration in dyadic relationships involving a powerful partner. Journal of Supply Chain Management 49, 42-65.

Patterson, K.D., Cavazos, D.E., Washington, M., 2014. It does matter how you get to the top: Differentiating status from reputation. Administrative Sciences 4, 73-86.

Petter, S., Straub, D., Rai, A., 2007. Specifying formative constructs in information systems research. Mis Quarterly 31, 623-656.

Piazza, A., Castellucci, F., 2014. Status in organization and management theory. Journal of management 40, 287-315.

Podolny, J., 2005. Status signals: A sociological theory of market competition. Princeton, NJ: Princeton University Press.

Podolny, J.M., 1993. A status-based model of market competition. American journal of sociology 98, 829-872.

Podolny, J.M., 2001. Networks as the Pipes and Prisms of the Market. American journal of sociology 107, 33-60.

Podolny, J.M., 2010. Status signals: A sociological study of market competition. Princeton University Press, Princeton.

Podolny, J.M., Phillips, D.J., 1996. The dynamics of organizational status. Industrial and Corporate Change 5, 453-471.

Pollock, T.G., Chen, G., Jackson, E.M., Hambrick, D.C., 2010. How much prestige is enough? Assessing the value of multiple types of high-status affiliates for young firms. Journal of Business Venturing 25, 6-23.

Pondy, L.R., 1967. Organizational conflict: Concepts and models. Administrative science quarterly 12, 296-320.

Pulles, N.J., Pulles, N.J., Veldman, J., Veldman, J., Schiele, H., Schiele, H., 2016. Winning the competition for supplier resources: The role of preferential resource allocation from suppliers. International Journal of Operations & Production Management 36, 1458-1481.

Pulles, N.J., Veldman, J., Schiele, H., Sierksma, H., 2014. Pressure or pamper? The effects of power and trust dimensions on supplier resource allocation. Journal of Supply Chain Management 50, 16-36.

Rahim, M.A., 2001. Managing conflict in organizations. Transaction Publishers, London.

Ramaseshan, B., Yip, L.S., Pae, J.H., 2006. Power, satisfaction, and relationship commitment in Chinese store—tenant relationship and their impact on performance. Journal of Retailing 82, 63-70.

Rawwas, M.Y., Vitell, S.J., Barnes, J.H., 1997. Management of conflict using individual power sources: A retailers' perspective. Journal of Business Research 40, 49-64.

Ringle, C.M., Wende, S., Becker, J.-M., 2015. SmartPLS 3. SmartPLS GmbH, Boenningstedt.

Rose, G.M., Shoham, A., 2004. Interorganizational task and emotional conflict with international channels of distribution. Journal of Business Research 57, 942-950.

Rosenberg, L.J., 1974. A new approach to distribution conflict management. Business Horizons 17, 67-74.

Rucker, D.D., Galinsky, A.D., 2008. Desire to acquire: Powerlessness and compensatory consumption. Journal of Consumer Research 35, 257-267.

Rungtusanatham, M., Miller, J., Boyer, K., 2014. Theorizing, testing, and concluding for mediation in SCM research: Tutorial and procedural recommendations. Journal of Operations Management 32, 99-113.

Russell, B., 1938. Power: A new social analysis. Allen and Unwin, London.

Samaha, S.A., Palmatier, R.W., Dant, R.P., 2011. Poisoning relationships: Perceived unfairness in channels of distribution. Journal of Marketing 75, 99-117.

Scheer, L.K., Stern, L.W., 1992. The effect of influence type and performance outcomes on attitude toward the influencer. Journal of Marketing research 29, 128-142.

Schiele, H., Calvi, R., Gibbert, M., 2012. Customer attractiveness, supplier satisfaction and preferred customer status: Introduction, definitions and an overarching framework. Industrial Marketing Management 41, 1178-1185.

Shervani, T.A., Frazier, G., Challagalla, G., 2007. The moderating influence of firm market power on the transaction cost economics model: an empirical test in a forward channel integration context. Strategic Management Journal 28, 635-652.

Shipilov, A.V., Li, S.X., 2008. Can you have your cake and eat it too? Structural holes' influence on status accumulation and market performance in collaborative networks. Administrative science quarterly 53, 73-108.

Shipilov, A.V., Li, S.X., Greve, H.R., 2011. The prince and the pauper: Search and brokerage in the initiation of status-heterophilous ties. Organization Science 22, 1418-1434.

Skarmeas, D., 2006. The role of functional conflict in international buyer—seller relationships: Implications for industrial exporters. Industrial Marketing Management 35, 567-575.

Sturm, R.E., Antonakis, J., 2015. Interpersonal Power A Review, Critique, and Research Agenda. Journal of management 41, 136-163.

Tabachnick, B.G., Fidell, L.S., 2007. Using multivariate statistics. Allyn & Bacon, Boston.

Takeishi, A., 2002. Knowledge partitioning in the interfirm division of labor: The case of automotive product development. Organization Science 13, 321-338.

Tan, K.C., Kannan, V.R., Handfield, R.B., Ghosh, S., 1999. Supply chain management: an empirical study of its impact on performance. International Journal of Operations & Production Management 19, 1034-1052.

Terpend, R., Ashenbaum, B., 2012. The intersection of power, trust and supplier network size: Implications for supplier performance. Journal of Supply Chain Management 48, 52-77.

Thompson, L., Thompson, L., 1998. Relationships and emotion: Building rapport. Upper Saddle River, NJ: Prentice Hall, pp. 168-192.

Torelli, C.J., Leslie, L.M., Stoner, J.L., Puente, R., 2014. Cultural determinants of status: Implications for workplace evaluations and behaviors. Organizational Behavior and Human Decision Processes 123, 34-48.

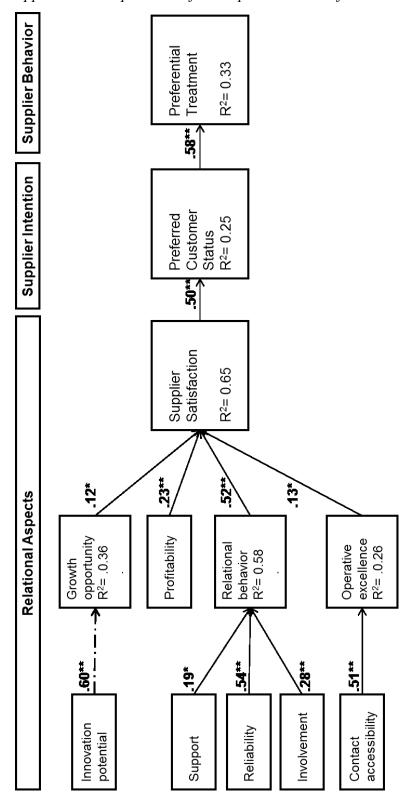
Vaaland, T.I., 2004. Improving project collaboration: start with the conflicts. International Journal of Project Management 22, 447-454.

Vos, F.G.S., Schiele, H., Hüttinger, L., 2016. Supplier Satisfaction: Explanation and Out-of-Sample Prediction for Direct and Indirect Procurement. Journal of Business Research 69, 4613–4623.

Washington, M., Zajac, E.J., 2005. Status evolution and competition: Theory and evidence. Academy of Management Journal 48, 282-296.

Welch, C., Wilkinson, I., 2005. Network perspectives on interfirm conflict: reassessing a critical case in international business. Journal of Business Research 58, 205-213.

Appendix B – Replication of the improved model of Vos et al. (2016)



### *Appendix C – used measures*

Supplier satisfaction (source: Vos et al. (2016))						
SupplierSatisfaction1	Our firm is very satisfied with the overall relationship to the University of Twente.					
SupplierSatisfaction2	On the whole, our firm is completely happy with the University of Twente.					
SupplierSatisfaction3	Generally, our firm is very pleased to have the University of Twente as our business partner.					
SupplierSatisfaction4	If we had to do it all over again, we would still choose to use the University of Twente.					
SupplierSatisfaction5 Our firm does not regret the decision to do business with the University of Twente.						
	Preferred customer status (source: Vos et al. (2016))					
	Compared to other customers in our firm's customer base					
	the University of Twente is our preferred customer.					
PreferredCustomerStatus2	we care more for the University of Twente.					
PreferredCustomerStatus3	the University of Twente receives preferential treatment.					
PreferredCustomerStatus4	we go out on a limb for the University of Twente.					
PreferredCustomerStatus5	our firm's employees prefer collaborating with the University of Twente to collaborating with other customers.					
	Conflict (source: Kumar et al. (1992))					
Conflict1	Our relationship with the buyer can be best described as tense.					
Conflict2	We have often disagreements in our working relationship with the University of Twente.					
Conflict3	We frequently clash with the University of Twente on issues relating to how we should conduct our business.					
	Conflict resolution (source: Benton and Maloni (2005))					
ConflictResolution1	Discussions within areas of disagreement are productive.					
ConflictResolution2*	Discussions intend to create more problems.**					
ConflictResolution3	Discussions increase effectiveness/strength of relationship.					
	Status (source: Torelli et al. (2014))					
	According to us					
Status1	the University of Twente has a high-status.					
Status2	the University of Twente is admired by others.					
Status3	the University of Twente has a high prestige.					
Status4	the University of Twente is highly regarded by others.					
	Reward power (source: Pulles et al. (2014))					
RewardPower1*	The University of Twente offers rewards so that we will go along with their wishes.					
RewardPower2	We feel that by going along with the University of Twente, we will be favored on other occasions.					
RewardPower3	If we do not do as asked, we will not receive the rewards offered by the University of Twente.					
RewardPower4	The University of Twente offers us rewards if we agree with their requests.					
	Coercive power (source: Pulles et al. (2014))					
CoercivePower1	The University of Twente makes it clear that failing to comply with their requests will result in penalties against us.					
CoercivePower2	If we do not agree with the University of Twente's suggestions, they could make things difficult for us.					
CoercivePower3	If we do not do as asked, we will not receive very good treatment from the University of Twente.					
CoercivePower4	If we do not go along with the University of Twente, they might withdraw certain services/resources we need.					

<sup>\* =</sup> deleted item; \*\* = reversed question

*Appendix D – results non-response bias test* 

	Respondents group	N	Mean	Sample mean	T-value	Std. Deviation Std	. Error Mean
SupplierSatisfaction1	<25%	26	4.15		0.30	0.97	0.19
SupplierSausiaction	>75%	26	4.08	4.12	0.30	0.89	0.17
Cymulian Catiafaction 2	<25%	26	4.00		0.00	0.94	0.18
SupplierSatisfaction2	>75%	26	4.00	4.01	0.00	0.69	0.14
Cumpliar Catiofaction?	<25%	26	4.00		1.02	0.94	0.18
SupplierSatisfaction3	>75%	26	4.23	4.10	-1.03	0.65	0.13
SupplierSatisfaction4	<25%	26	4.46		0.53	0.81	0.16
Supplier Sausiaction 4	>75%	26	4.35	4.45	0.55	0.75	0.15
SupplierSatisfaction5	<25%	26	4.50		0.20	0.71	0.14
SupplierSausiactions	>75%	26	4.46	4.51	0.20	0.71	0.14
PreferredCustomerStatus	<25%	26	3.19		0.25	0.94	0.18
1	>75%	26	3.12	3.19	0.23	1.24	0.24
PreferredCustomerStatus	<25%	26	3.15		0.68	0.83	0.16
2	>75%	26	2.96	3.12	0.08	1.18	0.23
PreferredCustomerStatus	<25%	26	3.15		1.90	0.97	0.19
3	>75%	26	2.58	3.04	1.90	1.21	0.24
PreferredCustomerStatus	<25%	26	3.77		0.89	0.91	0.18
4	>75%	26	3.50	3.67	0.07	1.24	0.24
Preferred Customer Status	<25%	26	3.00		1.47	0.75	0.15
5	>75%	26	2.65	2.93	1.7/	0.94	0.18
Conflict1	<25%	26	1.27		0.47	0.67	0.13
Commeti	>75%	26	1.19	1.32	0.47	0.49	0.10
Conflict2	<25%	26	1.31		-0.21	0.74	0.14
Connect2	>75%	26	1.35	1.37	-0.21	0.56	0.11
Conflict3	<25%	26	1.23		0.52	0.65	0.13
Connicts	>75%	26	1.15	1.30	0.52	0.37	0.07

	Respondents group	N	Mean	Sample mean	T-value	Std. Deviation	Std. Error Mean
ConflictResolution1	<25%	26	3.04		-0.21	1.40	0.27
Connictresolution	>75%	26	3.12	3.17	-0.21	1.18	0.23
ConflictResolution2	<25%	26	4.54		-0.38	0.81	0.16
	>75%	26	4.62	4.64	-0.36	0.64	0.12
ConflictResolution3	<25%	26	3.12		0.95	1.14	0.22
Connectivesolutions	>75%	26	2.81	3.11	0.93	1.20	0.24
Status1	<25%	26	4.12		-0.19	0.82	0.16
Statust	>75%	26	4.15	4.13	-0.19	0.67	0.13
Status2	<25%	26	3.96		-0.35	0.92	0.18
Statusz	>75%	26	4.04	3.99	-0.55	0.66	0.13
Status3	<25%	26	3.96		1.06	0.96	0.19
Statuss	>75%	26	4.19	4.08	-1.06	0.57	0.11
Status4	<25%	26	4.04		0.52	0.92	0.18
Status4	>75%	26	4.15	4.11	-0.53	0.61	0.12
RewardPower1	<25%	26	1.81		0.90	1.06	0.21
Rewardrowerr	>75%	26	1.58	1.85	0.90	0.76	0.15
RewardPower2	<25%	26	2.23		1.08	1.27	0.25
Rewalur Owei2	>75%	26	1.88	2.27	1.00	1.03	0.20
RewardPower3	<25%	26	1.88		0.71	1.11	0.22
Rewardr Owers	>75%	26	1.69	2.04	0.71	0.84	0.16
RewardPower4	<25%	26	1.77		1.84	0.99	0.19
Rewalur Owel4	>75%	26	1.35	1.63	1.04	0.63	0.12
CoercivePower1	<25%	26	1.65		0.27	1.09	0.21
Coelciverowell	>75%	26	1.58	1.72	0.27	0.99	0.19
CoercivePower2	<25%	26	1.81		0.14	0.94	0.18
Cocicive owerz	>75%	26	1.77	1.83	0.14	1.11	0.22
CoercivePower3	<25%	26	1.81		0.14	0.98	0.19
COCICIVELOMEIA	>75%	26	1.77	1.93	0.14	1.07	0.21
CoercivePower4	<25%	26	1.77		0.72	1.07	0.21
COCICIVEI OWEI4	>75%	26	1.58	1.83	0.72	0.86	0.17

Appendix E – results comparison revenues of respondents and non-respondents

Group Statistics									
Std. Std. Error									
	N	Mean	Deviation	Mean					
Respondents	103	178628,63	413164,723	40710,330					
Non-respondents	449	78809,85	197016,274	9297,773					

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Inkoopvolume is the same across categories of Complete.	Independent- Samples Mann- Whitney U Test	,016	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Appendix F-results factor analysis

Rotated Component Matrix<sup>a</sup>

	Rotated Component Matrix"  Component									
	1	1 2 3 4 5 6								
SupplierSatisfaction1	,740	,205	,247	-,288	-,045		7 ,088			
SupplierSatisfaction2	,754	,171	,332	-,229	-,100		ĺ í			
SupplierSatisfaction3	,843	,194	,183	-,120	-,018		,102			
SupplierSatisfaction4	,735	,288	,174	-,243	-,232		,063			
SupplierSatisfaction5	,746	,297	,154	-,146			,024			
PreferredCustomerStatus1	,333	,770	,165	,051	,048	1	-,014			
PreferredCustomerStatus2	,221	,870	,055	,047	,150		-			
PreferredCustomerStatus3	,104	,829	,187	-,019	-,105	,135	,015			
PreferredCustomerStatus4	,094	,761	,218	-,195	-,010		-			
PreferredCustomerStatus5	,195	,733	,097	-,001	-,105					
Conflict1	-,270	-,041	-,111	,851	,127	,045	-,032			
Conflict2	-,188	-,068	-,091	,851	,177	-,086	,121			
Conflict3	-,222	-,019	-,136	,859	,205	-,046	,041			
ConflictResolution1	,033	-,096	,054	,045	,012	-,107	,893			
ConflictResolution2	,079	-,027	,156	-,839	,033	-,101	-,003			
ConflictResolution3	,174	,046	,102	,053	-,013	,068	,859			
Status1	,217	,157	,835	-,151	-,061	-,054	,047			
Status2	,237	,172	,846	-,084	-,098	,052	,077			
Status3	,188	,164	,897	-,133	-,155	-,012	,058			
Status4	,207	,214	,893	-,162	-,080	-,015	,032			
RewardPower1	,018	,140	,052	-,139	,056	,797	,047			
RewardPower2	-,006	,132	-,012	,063	,353	,621	,030			
RewardPower3	-,174	-,090	-,104	,143	,359	,750	-,040			
RewardPower4	,009	-,053	,010	-,016	,261	,818	-,102			
CoercivePower1	-,037	-,023	-,183	,061	,775	,199	-,018			
CoercivePower2	-,152	,000	-,114	,149	,867	,210	-,022			
CoercivePower3	-,235	-,037	-,036	,110	,707	,388	,127			
CoercivePower4	-,110	,008	-,044	,213	,672	,454	-,077			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Appendix G – The model of Vos et al. (2016) combined with this research

