The Impact of Psychological Contract Importance on the Relationship between the HRM System and Employee Attitudes.

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ABSTRACT:
The goal of this study is to explain the variance found in the relationship between the HRM system and employee attitudes. Recently researchers called upon the influence of employees themselves as an active actor in this relationship. They argued that the goals and needs of employees influence the impact of HRM practices on employees (e.g. Nishii & Wright, 2007; Bowen & Ostroff, 2004). In this study, I theorized that the relationship between the HRM system and employee attitudes is moderated by the importance employees demonstrate towards certain outcomes of HRM practices. The concept of psychological contract importance is used, since this variable reflects the importance of employees. To research the moderating effect of psychological contract importance, a survey (questionnaire) was distributed, consisting of mainly closed-ended questions. 160 individual employees filled out the questionnaire. Multiple regression analysis was used to analyse the data. The results indicated that the HRM system and trust in management were important predictors of employee attitudes. Furthermore, the development- and growth-dimension of psychological contract importance was found to negatively moderate the relationship between the HRM system and employee attitudes.

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HRM system, HRM practice, Job Satisfaction, Affective Organizational Commitment, Employee Attitudes, Psychological Contract, Psychological Contract Importance
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1. Introduction
A great deal of research has focussed on employee attitudes and behaviour as the link between HRM and organizational performance. In which the most focal aspects of employee attitudes in this field of research are job satisfaction and affective organizational commitment (Saari & Judge, 2004). These concepts refer to the affective state towards their job (job satisfaction) and their affective state towards the organization (affective organizational commitment). HRM systems are designed to positively influence the individual employee attitudes, which would result in an increased firm performance on an organizational level (e.g. Nishii, Lepak & Schneider, 2008). Furthermore, positive employee attitudes are also associated with, for example, a decrease in turnover intentions and absenteeism (Yu & Egri, 2005). Hence, there is a great interest in understanding the relationship between the HRM system and employee attitudes in order to increase firm performance. The body of research related to the link between HRM and employee attitudes is of decent size. For example, Innocenti, Pilati and Peluso (2011) found a significant effect of the HRM system on employee attitudes ($\beta = 0.13$, $p < 0.01$). Macky and Boxall (2007) argued that the HRM system is significantly related to both job satisfaction ($r = 0.72$, $p < 0.001$) and affective commitment ($r = 0.61$, $p < 0.001$). Kooij, Jansen, Dikkers and De Lange (2010) found that the HRM system was related to affective commitment ($r = 0.42$, $p < 0.05$) and job satisfaction ($r = 0.34$, $p < 0.05$). Moreover, Takeuchi, Chen and Lepak (2009) also demonstrated a correlation between the HRM system and job satisfaction ($r = 0.23$, $p < 0.05$) and affective commitment ($r = 0.25$, $p < 0.05$). Looking at these results, all studies found a positive and highly significant correlational relationship between the HRM system and employee attitudes, however the strength of the relationship differed greatly. Therefore, various researchers argued that the relationship between HRM and employee attitudes is affected by moderators and mediators such as; trust in management (Nishii et al., 2008), predictability (Harley, Sargent & Allen, 2010) and age (Kooij et al., 2010; Kooij, Guest, Clinton, Knight & Dikkers, 2013). Recently, there is a call for including the influence of employees as active actors in this relationship. Nishii and Wright (2007) argued that the signals of HRM can be interpreted differently, depending on the fit between the offered HRM practices within the HRM system and the personal goals and values of the employee. Hence suggesting that HRM system can yield different outcomes per employee. Kinnie, Hutchinson, Purcell, Rayton and Swart (2005) also suggested to research the effect of employee needs which affect the reactions of employees to HRM practices within the HRM system. Furthermore, Guzzo and Noonan (1994) argued that employees are not consistently interpreting the signals of the HRM system, and Bowen and Ostroff (2004) argued that the impact of HRM practices are depending on the relevance of the HRM system to the employees. Moreover, this relevance is suggested to be based their personal goals. Hence, research suggested that the effect of the HRM systems depends on the individual goals and importance of employees.
Since the mid-1990s researchers are intensively investigating the concept of psychological contract. The psychological contract refers to a cognitive contract of promised obligations between employer and employee. Hence, the promises of an employer to the employee form a psychological contract. Restubog, Zagency, Bordia and Tang (2013) argued that personal needs and goals determine the value employees attach to various aspects of the psychological contract. Rousseau (1995) referred to the ‘value an employee attaches to aspects of their psychological contract’ as psychological contract importance. Thus literature suggested that employees have differing needs and goals, which are reflected in their psychological contract importance (Restubog et al., 2013). In this study, I will use the concept of psychological contract importance as a reflection of these needs and goals of the employees. Moreover, I theorize that the level of psychological contract importance determines the value of the HRM system to the employee, and therefore moderates the relationship between the HRM system and employee attitudes. Kooij et al. (2010) and Kooij et al. (2013) already found that age affected the relationship between certain bundles of HRM practices and employee attitudes. As they found support for their hypotheses, they argued that employees’ needs change depending on age, which in turn affected the relationship between the HRM system and employee attitudes. However, I argue that the true moderator in this scenario was the importance an employee demonstrated. This importance can very well be constituted by, for example, age, personality (e.g. ambition), or family situation. Figure 1, uses psychological contract importance as a reflection of an employee’s importance, and is a broader and more inclusive model. Using this model, a scholar could research the effect of context variables (e.g. age) on the relationship between the HRM system and employee attitudes, while providing a clear understanding of how this variable is influencing the relationship.

In this study I research whether the psychological contract importance will affect the relationship between HRM and employee attitudes. I theorize that psychological contract importance will moderate the relationship between HRM and employee attitudes.

Research question: To which extent does psychological contract importance influence the relationship between HRM and employee attitudes?
This study contributes to uncover the nature of the relationship between the HRM system and employee attitudes. In doing so I answer the call of, for example, Kinnie et al. (2005) or Nishii and Wright (2007) by researching the impact of the needs and goals of employees on the relationship between the HRM system and employee attitudes through psychological contract importance. Moreover, from a practical view it is important to ensure a high level of employee attitudes as it is linked to organizational performance (Innocenti et al., 2011; Nishii et al., 2008). From that point of view, it is important to understand how psychological contract importance influences the impact of the HRM system on employees attitudes. In doing this HR managers could benefit from this knowledge and reorganize the HRM system within their organization. This could, for example, imply focussing on certain HRM practices within the HRM system, or minimalizing resources spent on other HRM practices. Furthermore, higher levels of employee attitudes will also result in a decrease in certain costs (e.g. turnover intentions and absenteeism) (Yu & Egri, 2005). Both an increase in organizational performance, or a decrease in costs can have a great impact on an organization. This study can offer organizations tools to manage employee attitudes, and hence impact their organizational results.

2. Theoretical framework

2.1 Human Resource Management Systems
Firms are always looking for ways to triumph over competitors and the human capital of the organization can be seen as the most valuable competitive asset of the organization (Meyers & Woerkom, 2014; Collings & Mellahi, 2009). Once managed properly, employees can turn out to be a major asset in achieving organizational goals (Boxall, 2003). Boselie (2010, p.5) broadly defined human resource management: “HRM involves management decisions related to policies and practices that together shape the employment relationship and are aimed at achieving individual, organizational and societal goals”.

HRM can be measured on various levels. The highest level of HRM is the HRM philosophy. This philosophy refers to the guiding principles that are behind the way the organization value and treat the employees via their HRM system (Kepes and Delery, 2007). Hence the HRM philosophy guides the content and aim of the HRM system in general. These HRM systems consist of HRM policies (the guidelines for specific human resource activities), HRM practices (the identification of broad activities to implement the policy) and finally the HRM processes (the detailed explanations of how the practices are executed) (Monks, Kelly, Conway, Flood, Truss & Hannon, 2013). Hence the policies, practices and processes are the detailed execution of an HRM system. The HRM system in general is
designed to accomplish a specific desired effect (Lepak et al., 2006). Researchers tend to agree on the abstract definition that HRM systems are bundles of HRM practices, however there is a lack of consensus regarding the composition of these HRM systems (Lepak et al., 2006). Many conceptualizations of the HRM system exist in the HRM literature. As such, some papers organized the HRM system as a bundle of high performance work systems (Huselid, 1995), whereas others conceptualize the HRM system as a bundle of practices aimed to achieve a certain outcome (e.g. high involvement HRM or high commitment HRM). Often the HRM system is measured at the level of HRM practices. However, there is no list of applicable HRM practices that represent HRM in general. Boselie et al. (2005) identified 26 different practices throughout an analysis of 104 prominent journal articles in strategic HRM. According to them the key practices have to do with; selective recruitment and selection, compensation and performance pay, appraisal and performance management, training and development and employee involvement (Boselie et al., 2005). In this study we are interested in the HRM system as a whole of the HRM practices within a firm.

To bring more clarity, Lepak et al. (2006) argued that the HRM system directly affected an employee’s ability, motivation and opportunity to perform. Hence, the HRM system should be conceptualized as HRM systems which bundle ability-, motivation-, and opportunity-enhancing practices depending on their outcomes. These classified HRM systems are designed to improve the ability, motivation and opportunity of employees, which in turn affects the performance of employees (Jiang, Lepak, Hu & Bear, 2012). They argued that the HRM system positively influenced human capital and employee motivation. And due to this increase in these variables organizational outcomes will increase. Ability-enhancing HRM systems are designed to improve an employee’s skills and abilities (their capability to perform). HRM practices that are classified as ability-enhancing are recruitment and selection practices, as well as training and development practices (Jiang et al., 2012). Motivation-enhancing HRM systems are designed to enhance an employee’s motivation to perform, and include HRM practices related to performance management, compensation, incentives and rewards, benefits, promotion and career development and job security (Jiang et al., 2012). The third classification, opportunity-enhancing HRM system, is aimed to grant the employee the opportunity to use their skills and motivation to perform. Job design, work teams, employee involvement, and information sharing HRM practices are ‘empowering’ the employees. Some papers refer to these practices as empowerment-enhancing HRM practices (e.g. Gardner, Moynihan, Wright, 2007). In line with these arguments, I will study ability-, motivation-, and opportunity-enhancing HRM systems which are defined as bundles of ability-, motivation-, and opportunity-enhancing HRM practices.
2.2 Employee Attitudes

In exploring the ‘black box’ between HRM and organizational performance a great deal of research argued that the HRM system influences employee attitudes and behaviour that in turn affect organizational performance. Hence HRM influences individual employee attitudes and behaviours that in aggregate influence organizational performance (Nishii, Lepak and Schneider, 2008). Employees can have various attitudes or viewpoints about their job, colleagues and of course their organization. The most researched employee attitudes are job satisfaction and commitment (Saari and Judge, 2004). In line with this body of research I will also study job satisfaction and commitment as employee attitudes. The most common definition of job satisfaction origins from Locke (1976, p. 1304); “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”. Saari and Judge (2004) complemented to this definition by mentioning that job satisfaction refers to both cognitive and affective state as they are inextricably linked. Hence both thinking and feeling is implied in the definition of job satisfaction. When defining commitment it is important to note that there are three components of commitment in literature (Meyer & Allen, 1987), namely; affective, continuance and normative commitment. These three components yield three different motives behind commitment; “Employees with strong affective commitment remain because they want to, those with strong continuance commitment because they need to, and those with strong normative commitment because they feel they ought to do so” (Allen & Meyer, 1990, p.3). In this research we are interested in affective organizational commitment, since HRM practices are expected to influence the affective organizational commitment based on the social exchange theory (more on this in the next section). Affective organizational commitment is defined by Allen and Meyer (1990, p.2) as; “affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization”. Both concepts of employee attitudes are affective states, however affective commitment refers to the affective state towards the organization, whereas job satisfaction refers to the affective state towards his or her job (Hulin, 1991). Martin and Bennet (1996) researched the relationship between organizational commitment and job satisfaction, and demonstrated various theories on how these two variables are related to each other. They argued that “job satisfaction represents an affective response to specific work-related facets, whereas organizational commitment represents an affective response to a whole organization. As individual needs are satisfied, the resulting satiated state becomes associated with a focal organization” (Martin & Bennet, 1996). Using this theory, they argued that job satisfaction leads to organizational commitment. In the same paper they also claimed that organizational commitment is an antecedent to job satisfaction as the degree of organizational commitment affects the cognitive perception of the degree of job satisfaction. As a third theory, Martin and Bennet (1996) argued that job satisfaction and
organizational commitment are reciprocally related, in which the reciprocal effects are so rapid (or instantaneous) that a reliable causal interval could not be determined. Literature on job satisfaction and commitment provided support for the claim that these concepts are strongly related to each other (e.g. Yu & Egri, 2005; Mathieu & Zajac, 1990). For example, Yu and Egri found that affective commitment was highly correlated with job satisfaction ($r = 0.71, p < 0.001$), and both concepts were relatively equal in their relationship towards various other variables in the study. In this study employee attitudes are conceptualized as a higher-order construct that is reflected by both job satisfaction and affective commitment.

2.3 Relationship between HRM and Employee Attitudes

Guest (1997) argued that there was a need to increase theory on HRM, on performance, and the link between these two concepts. Since his appeal a great extent of research has been conducted in the field of human resource management to achieve an understanding of the ‘black box’ between HRM and organizational performance.

Employee attitudes are often seen as the link between the HRM system and organizational performance (e.g. Huselid, 1995). The social exchange theory (e.g. Blau, 1964) is often used to explain the relationship between the HRM system and organizational performance through employee attitudes. The social exchange theory has been developed and used throughout multiple fields of research such as; social psychology (e.g. Gouldner, 1960) and sociology (e.g. Blau, 1964). Although different perspectives have emerged throughout the years, the basic premise of the social exchange theory remains the same; “social exchange involves a series of interactions that generate obligations” (Cropanzano & Mitchell, 2005, p. 874). Whereas these interactions are interdependent on actions of other parties (Blau, 1964). Cropanzano and Mitchell (2005) reviewed the use of social exchange theory and highlighted the importance of rules and norms of the exchanges between actors. Most of the research regarding social exchange theory focus on the ‘norm of reciprocity’. In which the reciprocity or repayment origins from “(a) reciprocity as a transactional pattern of interdependent exchanges, (b) reciprocity as a folk belief, and (c) reciprocity as a moral norm” (Cropanzano & Mitchell, 2005, p.876). Hence, reciprocity is caused by either beliefs or norms, or by because of a reaction to an interdependent actor’s exchange. This latter case is rather important in the social exchange theory. This implies that if one person gives something beneficial to another, that the other person feels obligated to reciprocate with same measures, without explicit bargaining. Once this process has started, each action of an actor can provoke an action of another actor, and become an exchange-cycle. Furthermore, exchange rules can also be negotiated (e.g. work in exchange for pay). However, work relations that are based on reciprocity are considered better because it involves relationships with trust and commitment to one another (Molm, Takahashi &
Blau (1964) argued that social exchange, compared to pure economic exchange, implied unspecified obligations. He argued that social exchange refers to “favors that create diffuse future obligations” (Blau, 1964, p.93), and that social exchange generates ‘feelings of personal obligations, gratitude, and trust’ (Blau, 1964, p.94). Hence when favors are exchanged between employer and employee, the continual social exchange develops into a relationship accompanied with obligations and affective feelings (Cropanzano & Mitchell, 2005; Molm et al., 2000).

HRM practices are seen as an investment by the employer in the employee, which will be reciprocated by the employee through positive attitudes, which in turn positively affect the organizational performance (Nishii et al., 2008). These inducements by the organization fulfill employee needs by offering, for example, career opportunities, job design practices or job security, whereas employees show positive attitudes in return (Meijerink, 2014). Earlier in this paper we classified HRM practices based on their outcomes according to the work of Lepak et al. (2006). We distinguished ability-, motivation-, and opportunity-enhancing HRM systems. These three bundles of HRM practices yield different potential outcomes to employees. Ability-enhancing HRM practices such as job training offer the employee an opportunity to increase his or her knowledge or skills. Motivation-enhancing HRM practices such as incentives and rewards can be seen as an investment in employees by the employer in order to motivate employees, or to grant them useful feedback. And third, opportunity-enhancing HRM practices are aimed to offer employees the opportunity to perform through, for example, job design or employee involvement. The classified HRM bundles offer different incentives to the employees. And through the application of the social exchange theory we can understand how and why the HRM systems are reciprocated by employee through employee attitudes. HRM practices are seen as an investment by the employer because they yield various beneficial outcomes to the employee. And as many researchers claim, the social exchange theory explains the relationship between the HRM system and employee attitudes, because inducements by the employer are reciprocated by the employee (e.g. Nishii et al., 2008). Moreover, as Blau (1964) complemented, feelings of personal obligations and gratitude emerge in the case of social exchange relationships. Using this theory, we can explain why the ability-, motivation-, and opportunity-enhancing HRM systems can lead to an increase in employee attitudes. When an employee perceives job training (ability-enhancing HRM practice) as a beneficial inducement, this could then be reciprocated through employee attitudes. Moreover, when an employee regards performance-pay (motivation-enhancing HRM practice) as beneficial to them, this could also lead to an increase in employee attitudes. And lastly, participative job design (opportunity-enhancing HRM practice) can also be reciprocated by employees through employee attitudes once they are perceived to be beneficial inducement.
As this is a known theory, it has been researched multiple times before, yielding interesting results. Innocenti et al. (2011) found a significant effect of the HRM system on employee attitudes ($\beta = 0.13$, $p < 0.01$). Macky and Boxall (2007) argued that the HRM system is significantly related to both job satisfaction ($r = 0.72$, $p < 0.001$) and affective commitment ($r = 0.61$, $p < 0.001$). In the research of Guest (1999) the HRM system explained 29 per cent of the variance in job satisfaction. Wright, Gardner and Moynihan (2003) and Browning (2006) found that the HRM system was related to affective commitment (respectively $r = 0.55$, $p < 0.01$ and $\beta = 0.616$, $p < 0.001$). Takeuchi, Chen and Lepak (2009) also demonstrated a correlation between the HRM system and job satisfaction ($r = 0.23$, $p < 0.05$) and affective commitment ($r = 0.25$, $p < 0.05$). Kooij et al. (2010) found that the HRM system was correlating with affective commitment ($r = 0.42$, $p < 0.05$) and job satisfaction ($r = 0.34$, $p < 0.05$). However, in their research the relationship between various HRM practices and employee attitudes differed. Logically, in order to identify which HRM practices lead to higher levels of employee attitudes, it is needed to research the individual relationships between the variables.

Yi and Egri (2005) found that the following HRM practices were significantly related to affective commitment; recruitment ($r = 0.36$, $p < 0.001$), employee selection ($r = 0.26$, $p < 0.01$), performance management ($r = 0.28$, $p < 0.01$), training ($r = 0.25$, $p < 0.01$), compensation / job security ($r = 0.37$, $p <0.01$), and working conditions ($r = 0.28$, $p < 0.01$). And the following HRM practices were significantly related to job satisfaction; recruitment ($r = 0.24$, $p < 0.01$), employee selection ($r = 0.39$, $p < 0.001$), performance management ($r = 0.23$, $p < 0.05$), training ($r = 0.21$, $p < 0.05$), compensation / job security ($r = 0.40$, $p <0.01$), and working conditions ($r = 0.38$, $p < 0.01$). Harley et al. (2010) found support to link performance management practices to commitment ($r = 0.27$) and satisfaction ($r = 0.20$), both $p < 0.01$.

Jiang et al. (2012) researched the impact of the ability-, motivation-, and opportunity-enhancing HRM systems on operational outcomes, voluntary turnover and financial outcomes through human capital and employee motivation. They grouped job satisfaction and affective organizational commitment within the variable employee motivation. Jiang et al. (2012) found that all three HRM systems were positively related to human capital (respectively, $r = 0.29$, $r = 0.21$ and $r = 0.07$, $p < 0.01$) and employee motivation (respectively, $r = 0.07$, $r = 0.29$ and $r = 0.25$, $p < 0.01$). Hence the ability-enhancing HRM system merely affected human capital, the motivation-enhancing HRM system positively affected both human capital and employee motivation, and the opportunity-enhancing HRM system merely affected employee motivation. Both human capital and employee motivation were positively related to operational outcomes (respectively, $r = 0.16$ and $r = 0.26$, $p < 0.01$). In doing so, Jiang et al. (2012) acknowledged the impact of the HRM systems on organizational outcomes. Innocenti et al. (2011) also categorised the HRM practices in bundles accordingly to the
AMO-model of Appelbaum et al., 2000). Innocenti et al. (2011) found that the ability-enhancing and motivation-enhancing HRM systems were positively related to employee attitudes (respectively $\beta = 0.11$ and $\beta = 0.14$, $p < 0.01$), whereas the opportunity-enhancing HRM system was negatively related to employee attitudes ($\beta = -0.06$, $p < 0.01$). This last result is rather opposite to other findings, and might be a coincidence. Nevertheless, the relationship is significant, yet weak.

In line with the presented body of research I hypothesize that all three HRM systems are positively related to employee attitudes.

**Hypothesis 1:** The ability-enhancing HRM system is positively related to employee attitudes.

**Hypothesis 2:** The motivation-enhancing HRM system is positively related to employee attitudes.

**Hypothesis 3:** The opportunity-enhancing HRM system is positively related to employee attitudes.

According to Boselie (2010, p.58) progress has been made since the appeal of Guest (1997), however they noticed that there still was a lack of agreement and consensus about “what constitutes HRM, what performance is, and what the link is between the two”. Innocenti et al. (2011) proclaim that a lot of work has been done in order to achieve understanding of the ‘black box’, however they argued that there are still many ‘grey areas’ that remain unclear, and they called for more research on mechanisms that facilitate the relationship between HRM and organizational performance. This also applies to research on the relationship between HRM systems and employee attitudes. For example; Wright et al. (2003), Takeuchi et al. (2009), and Kooij et al. (2010) found that the HRM system was related to affective commitment (respectively $r = 0.55$, $p < 0.01$; $r = 0.25$, $p < 0.05$; $r = 0.42$, $p < 0.05$). Although, all these studies found a positive and highly significant relationship between the HRM system and affective commitment, the strength of the relationship differed greatly. Nishii et al. (2008, p.4) argued that the relationship between HRM practices and employee attitudes ‘may be more complex than previously thought’. In their study Nishii et al. (2008) argued that employees’ perceptions of HRM practices are affecting the employees’ attitudes and behaviour. Their results suggested that when an employee judges HRM practices within the HRM system to be implemented to enhance employee well-being, then HRM practices were positively related to employee attitudes (Nishii et al., 2008). Nishii and Wright (2007) argued that HRM practices can be interpreted differently by various employees depending fit between the offered HRM practices and personal goals. Kinnie et al. (2005) argued that the needs of employees would influence the effect of HRM practices on employees, which in turn could be reflected in their employee attitudes. Furthermore, Bowen and Ostroff (2004) argued that the impact of the HRM system on the employees depended on the relevance it has to the employees, based on their personal goals. Again, the social exchange
theory can be used to explain this. In order to reciprocate with positive employee attitudes, the inducements by the employer need to be found beneficial to the employee. And whether these inducements are perceived as beneficial or valuable to the employee depends on personal goals and needs of the employee (Nishii & Wright, 2007; Kinnie et al., 2005; Bowen & Ostroff, 2004). As stated above, Innocenti et al. (2011) found that the opportunity-enhancing HRM system was negatively related to employee attitudes ($b = -0.06$, $p < 0.01$), while other researchers found a positive relationship (e.g. Yi and Egri, 2005). Using the insights of Nishii and Wright (2007), Kinnie et al. (2005) and Bowen and Ostroff (2004) it seems logical that HRM practices do not always lead to improved employee attitudes. Kooij et al. (2010) and Kooij et al. (2013) argued that age of an employee affected the relationship between the HRM system and employee attitudes. They divided the HRM system in bundles of maintenance and development HRM practices. Maintenance HRM practices were related to protection, safety and responsibility (in order to preserve their situation), and development HRM practices were said to provide advancement, growth and accomplishments (Kooij et al., 2010, p.1119). They argued that as an employee becomes older, they will shift their interest from development HRM practices towards maintenance HRM practices. Kooij et al. (2010) claimed that age is indeed a great influencer on the relationship between the HRM systems and employee attitudes, because it affected the needs of the employee, which in turn affected the relationship. In short, they acknowledged that age influenced the needs of an employee, but they did not include it as a moderating variable as such. I argue that the importance an employee attaches to certain HRM practice outcomes moderates the relationship between the HRM system and employee attitudes, and that certain environmental or context factors such as age, personality or family situation (Morrison & Robinson, 1997) determine the yielded importance of an individual employee. In this study I introduce psychological contract importance as a variable that reflects the needs and goals of the employees, which is expected moderate the relationship between the HRM systems and employee attitudes. Including this variable should help us understand the differences that are found in the research regarding the relationship between HRM and employee attitudes (e.g. Kooij et al., 2010; and Takeuchi et al., 2009).

### 2.5 Psychological Contract Importance
Restubog et al. (2013) found that personal needs and goals determine the importance an employee attaches to various aspects of the psychological contract. In this study I will introduce psychological contract importance as a moderating variable on the relationship between HRM systems and employee attitudes, because psychological contract importance is reflecting the needs and goals of an employee. I will now clarify the concepts of the psychological contract and psychological contract importance.
The term psychological contract is defined originally by Argyris (1960). Levinson et al. (1962) and Schein (1965, 1980) extensively researched this phenomenon and redefined the concept. The research of Rousseau (e.g. Rousseau, 1989; 1990) is commonly accepted and widely known. In this study we will therefore use this widely accepted definition of the psychological contract; “Psychological contracts are individual beliefs in a reciprocal obligation between the individual and the organization” (Rousseau, 1989, p.121). The concept of psychological contract is commonly linked to the social exchange theory (Blau, 1964) and the reciprocity norm (Gouldner, 1960), since both theories are discussing employee behaviour in reciprocal exchange of benefits.

Formal employment contracts consist merely of legal requirements and societal norms. Other informal agreements between the employee and employer, which thus are not formally written down, are included in the psychological contract (Westwood, Sparrow & Leung, 2001). An important aspect in defining the psychological contract is the difference between perceived obligations and expectations. Expectations are general beliefs about what employees will or should receive, whereas the obligations of the psychological contract are beliefs that employees are entitled to receive because the employer promised it to them. For example; an employee can expect to have a clean working environment. This is a general expectation of an employee, however since it is not (specifically) promised by the employer it is not perceived as an obligation in the psychological contract. Though, when an employer promises an employee, for example, development opportunities, it becomes part of the psychological contract. Only those expectations that origin from promises are perceived as obligations in the psychological contract (Robinson, 1996). Morrison & Robinson (1997, p.228) further define the concept ‘promise’ and add multiple origins of the concept; “A promise is defined as any communication of future intent (Rousseau, 1989). This intent can be conveyed through several means: written document, oral discussion, organizational practices or policies, and so on (Rousseau & Greller, 1994; Rousseau & McLean Parks, 1993)”.

As stated in the definition above, the psychological contracts are ‘individual beliefs’. This is an important characteristic of the psychological contract. Even though its content is about reciprocal obligations between the employee and the employer, the psychological contract is experienced by the employee (Freese, 2007). Because of its idiosyncratic nature (Rousseau, 2005), psychological contracts are about what an employee perceives as obligations between the employee and the employer. This also implies that beliefs about the obligations which are held by employees are not necessarily shared by the employer (e.g. Rousseau & Parks, 1993; Shore & Tetrick, 1994;). Moreover, it is not about promises that an employer keeps, but how it is perceived by the employee that affects the status of the psychological contract (Freese, 2007). Hence psychological contracts are viewed upon from, and measured on, the side of the employee in this paper.
Not fulfilling these obligations results in breach or violation of the psychological contract. Whereas the breach of a psychological contract refers to the cognitive perception of an employee that an employer has not fulfilled its obligations. Psychological contract violation refers to the emotional reaction of the employee when perceiving the discrepancy (Morrison and Robinson, 1997). Violation of the psychological contract does not necessarily mean that an employee leaves the company, because it is something different than an employment contract. Nevertheless, the outcomes of psychological contract violation has been studied intensively throughout the years, and are often negative. According to Restubog et al. (2013) this is a logical response by the employee in order to ‘even the score’ when an organization failed to fulfil their promises. Psychological contract violation is found to be related to, for example; decreased organizational citizenship behaviour (Robinson & Morrison, 1995); decreased loyalty (Tekleab & Taylor, 2000), decreased organizational commitment (e.g. Guzzo, Noonan & Elron, 1994; Schalk, Freese & Van den Bosch, 1995), decreased job satisfaction (e.g. Portwood & Miller, 1976; Robinson & Rousseau, 1994; Schalk, Campbell & Freese, 1998), and increased actual employee turnover (e.g. Robinson & Rousseau, 1994; Tekleab, Takeuchi & Taylor, 2005).

Restubog et al. (2013) argued that personal characteristics of employees such as needs and goals define whether particular aspects of the psychological contract can be of more importance to these employees than other aspects. They used the conceptualization of Rousseau (1995) to define psychological contract importance. Rousseau (1995) referred to psychological contract importance as the value an employee attaches to aspects of their psychological contract. Restubog et al. (2013) measured psychological contract importance using a 7-point scale on 15 items which they adopted from prior research (Kickul, Neuman, Parker, & Finkl, 2001). Using this 7-point scale, the participants rated their importance regarding that specific item. The items of Kickul et al. (2001) include, for example, ‘competitive salary’, ‘pay and bonuses tied to performance’, ‘vacation benefits’, ‘retirement benefits’, ‘health care benefits’, ‘job security’, and ‘flexible work schedule’. Hence, psychological contract importance refers the value an employee attaches to certain aspects within the psychological contract. These levels of importance vary by person as one employee, for example, attaches more value to promotion opportunities than other employees. This importance can very well be constituted by, for example, age, personality (e.g. ambition), or family situation. In this study we are not examining what is affecting this importance, but only measure its presence.

Restubog et al. (2013) theorized and found that when employee’s degree of psychological contract importance moderated the relationship between psychological contract breach and violation. Meaning that when an employee showed higher psychological contract importance, then psychological contract breach would lead to a higher degree of psychological contract violation.
compared to a person with lower psychological contract importance. In this study we are not focussing on psychological contract breach or violation, however, I will use the concept of psychological contract importance as it reflects the needs and goals of employees. Hence, I will use the items of Kickul et al. (2001) in order to measure psychological contract importance, but I will not research whether these aspects are promised or not, because we are not interested in the psychological contract in this study.

I distinguish three dimensions of psychological contract importance based on the AMO-model of Appelbaum et al. (2000). Hence, as different employees have different goals and needs these can be categorized into three categories namely; ability-importance, motivation-importance and opportunity-importance. I expect that employees can demonstrate their psychological contract importance through these three dimensions. Based on the definitions of the concepts I will theorize which items of Kickul et al. (2001) theoretically fit in these dimensions.

The ‘ability-importance’ concept of psychological contract importance groups aspects of the psychological contract that are linked to the development of knowledge and skills. Ability-importance can be defined as the importance an employee attaches to the development of his or her skills and abilities. Based on this definition I argue that following items of Kickul et al. (2001) fit to this concept; ‘job training’, ‘opportunities for personal growth’, ‘opportunity to develop new skills’, and ‘continual professional training’.

The ‘motivation-importance’ concept, as a second dimension of psychological contract importance, groups the items of Kickul et al. (2001) that highlight an importance regarding motivation and feedback. The motivation-importance dimension can be defined as the importance an employee attaches to motivating incentives and directions or feedback by the employer. This dimension is expected to include the following aspects; ‘recognition of my accomplishments’, ‘opportunities for promotion and advancement’, ‘pay and bonuses tied to performance’, and ‘competitive salary’.

The third and last dimension of psychological contract importance is the ‘opportunity-importance’ concept. This dimension can be defined as the importance an employee attaches to his or her opportunity to perform through involvement, the availability of resources and autonomy. The opportunity-importance groups the following psychological contract aspects; ‘participation in decision-making’, ‘freedom to be creative’, ‘a job that provides autonomy and control’, ‘enough resources to do the job’ and ‘adequate equipment to perform job’.

Hence, employees showing high ability-importance value the development of their knowledge and skills highly. Employees with high motivation-importance yield a great importance to motivating
incentives or feedback. And employees demonstrating high levels of opportunity-importance value their opportunity to perform highly. Psychological contract importance is categorized in ‘dimensions’ because a high importance on one dimension does not imply a lower importance on another dimensions. Employees can show high importance on all three dimensions of psychological contract importance, whereas it is also possible that employees show low importance on all three dimensions. Nevertheless, the dimensions are thus not interdependent. In short, in this study I use psychological contract importance as a moderator on the relationship between HRM systems and employee attitudes, as psychological contract importance indicates what employees consider as important in terms of what is being offered to them by the employer. In the next section I will further elaborate on this theory.

2.6 Psychological Contract Importance as a Moderator on the Relationship between the HRM System and Employee Attitudes

As clarified above the relationship between HRM systems and employee attitudes depended on the needs and goals of employees (e.g. Bowen & Ostroff, 2004). Furthermore, these needs and goals are reflected in the importance of various aspects of the psychological contract (i.e. psychological contract importance) (Restubog et al., 2013). Recently I distinguished three dimensions of psychological contract importance. In line with the social exchange theory, I theorize that psychological contract importance moderates the relationship between HRM systems and employee attitudes, because the personal needs and goals employees are argued to influence this relationship. When an employee shows high ability-importance, it is expected that the ability-enhancing HRM system will show a greater effect on employee attitudes, compared to an employee with a lower ability-importance. This theory can be well explained through the social exchange theory as presented above. For example, an offered training would result in higher levels of employee attitudes when an employee feels the need for development of his or her knowledge and skills.

When an employee does not value knowledge and skills development, it seems logically that the offered training would not result in an increase of employee attitudes, because the HRM practices are not valued as beneficial inducements by the employer. Furthermore, offering performance-pay HRM practices would not increase employee attitudes when an employee shows low motivation-importance. Likewise, implementing employee-involving HRM practices would not lead to a higher level of employee attitudes if an employee does not demonstrate a high degree of opportunity-importance. Hence, the chance that a non-beneficial inducement is reciprocated by an increase in employee attitudes is not likely according to the social exchange theory. Since inducements by the employer are only reciprocated with positive employee attitudes when there are seen as beneficial to the employee well-being (Nishii et al., 2008) it is logical that the importance of these HRM practices moderates the relationship between the HRM system and employee attitudes. In order to
measure the moderating effect of the psychological contract importance dimensions on the relationship between the HRM system and employee attitudes, I need to measure the impact of the psychological contract importance dimensions on the three bundles of HRM practices (Lepak et al., 2006). Hence I will link the three psychological contract importance dimensions to the ability-, motivation-, and opportunity-enhancing practices (Lepak et al., 2006). The relationship between ability-enhancing practices and employee attitudes is theorized to be moderated by the ability-importance. Likewise, the relationship between motivation-enhancing practices and employee attitudes is considered to be moderated by the degree of motivation-importance. Therewithal, the relationship between opportunity-enhancing HRM practices and employee attitudes is theorized to be moderated by opportunity-importance. Based on the presented arguments I introduce the following hypotheses;

**Hypothesis 4:** The ability-importance dimension of the psychological contract positively affects the relationship between the ability-enhancing HRM system and employee attitudes.

**Hypothesis 5:** The motivation-importance dimension of the psychological contract positively affects the relationship between the motivation-enhancing HRM system and employee attitudes.

**Hypothesis 6:** The opportunity-importance dimension of the psychological contract positively affects the relationship between the opportunity-enhancing HRM system and employee attitudes.

In summary, this study will research whether the three dimensions of psychological contract importance moderate the relationship between three HRM systems and employee attitudes (as illustrated in figure 2).

![Diagram](image)

**Figure 2 - Moderating effect of Psychological Contract Importance Dimensions on the relationship between the HRM systems and Employee Attitudes**
3. Methodology
Edmondson and McManus (2007) created a framework that can be used to establish methodological fit in a research design. According to them, the design of a research depends on the state of prior theory and research on that topic. Following their descriptions, the theory and research regarding this topic is considered to be ‘mature’ since the theory consists of well-developed constructs and models which have been studied over time by a great amount of researchers (Edmondson & McManus, 2007, p.1158). A mature state calls for research which refines the broad existing body of literature by interrelating theories or testing a new setting for existing theory. Furthermore, the goal of this study is to assess whether the psychological contract importance of employees can explain the differences found in the relationship between the HRM system and employee attitudes. In order to establish internal consistence within the research design, i.e. methodological fit, it is suggested to use a quantitative data collection method, focused hypotheses, based on existing constructs and measures, and by conducting statistical analyses.

In order to test the stated hypotheses quantitative data has been collected through a survey. Surveys are research methods that study a sample of individuals from a broader population, resulting in quantitative data. Using this quantitative data we are able to test hypotheses using data analysis methods, which is the goal of this study. Babbie (2013, p.229) argued that “survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly” and “carefully constructed standardized questionnaires provide data in the same form from all respondents. Surveys are also excellent vehicles for measuring attitudes and orientations in a large population”. Therefore I chose to use surveys in order to collect data.

3.1 Respondents
This study aims to test the moderating effect of the psychological contract importance of employees on the relationship between HRM practices within the HRM systems as perceived by employees, and employee attitudes as affective feelings experienced by employees. Hence, we are interested in the employee and the employee’s affective reactions to the perceived HRM practices. Furthermore, since we want to measure the relationship between the actual perceived HRM practices and employee attitudes, we do not have to control for the degree of implementation of such practices. This implies that when an employee indicates that he or she has perceived HRM practices, we can relate the influence of these practices to the perceived employee attitudes. In the literature regarding HRM practices there is an increasing view that promotes the use of employees as the source of information to measure the implementation of HRM practices, since senior managers are often not in a position to give a fair estimation (Latorre, Guest, Ramos & Gracia, 2016). Hence, in the
unit of analysis was ‘employees’, with individual employees as units of observation. In order to be able to draw conclusions on employees in general we needed a sample that represents the average employee as much as possible. The sector in which organizations operate significantly influences the working processes within the firm (Innocenti et al., 2011). This implies that firms overall ‘do things differently’ depending on the sector. In order to generalize findings regarding employees it is important to research employees on various sectors. Moreover, employees of various firm sizes had to be included to generate a representative sample. Hence in order to collect a heterogeneous sample of respondents I distributed the survey throughout all possible branches within my own network, instead of researching a hand full of organizations. Ideally, I would have included all kinds of employees, working in all kinds of sectors and firm sizes across the world. However, since I was restricted to my own capabilities the observed sample of employees were mainly located in the Eastern part of The Netherlands. The respondents of this study originated from various sectors, among others; pharmaceutical industry, industrial sector, service sector, municipality and supermarkets. Firm sizes ranged between really small firms (< 10 employees) and rather big firms (> 50.000 employees). I did not include the sector or firm size as a control variable, since the broad distribution of the surveys should have diminished these effects. In order to assess the generalizability of the sample I compared the data of the sample with data on the Dutch employees in general. I used data as provided by ‘Centraal Bureau voor de Statestiek’ (CBS) regarding the Dutch labor market in the second quartile of 2017. This is the same quartile the survey as distributed and received. As I wanted to assure the anonymity, not all questions in the survey were obligated. Therefore, not all information is available on all respondents. Due to the absence of some relevant data, I only compared the sample on basis of the employees’ gender, age and amount of labor hours. The amount of females compared to males is fairly distributed (figure 3). Furthermore, because this convenience sample is generated from my own network, the amount of employees between 15 and 35 years old was relatively high (figure 4). Regarding the distribution of labor hours, the employees working less than 12 hours per week were ill represented (figure 5). Despite the fact that it was not a perfect representation of all Dutch employees within labor market, it is fair to say that the sample in this study seemed rather comparable. However, without a comparison of the sectors and firm sizes distribution, it remained hard to argue its resemblance. Based on the data and pre-knowledge that was present, I continued to use the sample with caution.
3.2 Data Collection Method

The variables were measured on one point in time through the observation of a sample through a survey. Therefore this research design is considered to be a cross-sectional study (Babbie, 2013). As I argued above, a survey is an appropriate method to gather data for our hypotheses. In order to collect the data, I constructed a questionnaire consisting mainly of widely known and accepted instruments. The choices made for these instruments, for example regarding the validity and reliability of the measures, are explained in the next section. In addition, all the associated items belonging to the instruments will be elicited. The questionnaire consisted of 62 questions or statements, of which one was open-ended, and 61 items were closed-ended. The one open-ended question measured the amount of hours worked per week by the employee. Babbie (2013, p.231) argued that closed-ended questions should have response categories include all possible responses, and the answer categories should be mutually exclusive. All the closed-ended questions and statements were measured using a 5-point scale. Therefore, both requirements were met. The
respondents had to be able to answer the questions. In order to assure the suitability of the questionnaire, I reviewed the questionnaire using a panel of five respondents (3 employees, and 2 students). The chosen instruments were tested based on their difficulty to understand and to answer, since a respondent is often unwilling to study an item in order to fully understand the meaning (Babbie, 2013). The test of the instruments did not show a valid reason not to use them. Furthermore, the 5-point scales used in the questionnaire were found to facilitate quick answering of the questions while also preserving reliability and providing clear data for the analysis. Moreover, the questions and statements of the questionnaire were stated in Dutch as the respondents originated from (the eastern part of) the Netherlands. The items regarding HRM systems and affective commitment were available in Dutch. The other items were carefully translated in order to preserve the essence and meaning of the English question/statement. These translations were also tested and corrected by the test panel.

In this study, I used an online self-administered questionnaire which was constructed and distributed using ‘Google Forms’. Online self-administered questionnaires are way cheaper and quicker than face-to-face interviews, and yield response rates comparable to those of mail surveys (Kaplowitz, Hadlock & Levine, 2004). Moreover, online questionnaires can reach and collect data of a great amount of respondents in a short period, while costing minimal resources, and gathering data that can be imported to data analysis software (Ilieva, Baron & Healey, 2002).

The questionnaire was distributed by mail to employees within my own network between the 17th and the 24th of May 2017. The link to the questionnaire was accompanied with a short and general introduction to the questionnaire and my research. This introduction is included in the appendix. The questionnaire was aimed to give the respondent the feeling that he or she could give an honest answer. Therefore no names, age, company names, firm sizes or whatsoever was asked. In the introduction I announced to treat their answers with care. In order to establish a greater response rate, vouchers were raffled among those who entered their email address. This were five vouchers of a leading Dutch webshop, with a worth of 10 euros each. The email addresses were solely collected in order to draw winners and to contact these persons. After the raffle, and the dispatch of the vouchers, the email addresses were deleted. Ilieva et al. (2002) argued that there might be a chance that respondents only participated in order to participate in the raffle. However, they argued that the effect was diminished when the researcher had control over the individuals entering the survey. Since this sample mainly consisted of people within my own network, and since the vouchers were not worth that much this effect is expected to be low. However, it could still have a slight impact for some respondents.
The questionnaire was closed on the 14th of June 2017, giving each of the respondents at least three weeks to fill out the questionnaire. Approximately one week after the first mail a reminder was sent. In order to reach a decent amount of respondents for this study I asked my network to forward my mails within their network, and to report the approximate amount of receivers. Added together, my questionnaire was distributed among 450-500 people, using my contacts to distribute the questionnaire and the reminders. On the 12th of June, 160 respondents filled out the questionnaire, equaling a response rate between 32 per cent.

3.3 Measurement of the Variables
A full list of the items used for the questionnaire are presented in the appendix.

3.3.1 Human Resource Management System
As argued in the theory section of this study, I study HRM systems as bundles of ability-, motivation-, and opportunity-enhancing HRM practices. I used the instruments of Liao, Toya, Lepak and Hong (2009) in order to measure the perceptions of employees regarding the presence of HRM practices. In order to fit the definitions of Jiang et al. (2012) the scales of Liao et al. (2009) had to be complemented by the scales of Takeuchi et al (2007), resembling the instrument as used by in the paper of Meijerink and Bos-Nehles (2016), in which Takeuchi et al. (2007) complemented scales to measure the employee’s perceptions of staffing and appraisal practices. Since the employees were filling out the form, I measured the HRM practices as perceived by the employees and not the intended or offered HRM practices by the management. Because these items were aimed at the employees, and due to the fact that this instrument fitted the definitions of Jiang et al. (2012) it was included in this study. Furthermore, the panel reviewing the survey argued that this instrument is easy to understand and to fill out. Therefore I chose this instrument. I was able to receive the items of Meijerink and Bos-Nehles (2016) in order to measure the employee’s perceptions of the three HRM systems. Meijerink and Bos-Nehles (2016) grouped the items of Liao et al. (2009) and Takeuchi (2007) based on five high performance work practices (HPWPs). The five HPWPs of Meijerink and Bos-Nehles (2016, p.26) were; ‘selective staffing’ (6 items; e.g. “Selection focuses on selecting the best all-round candidate”), ‘extensive training’ (6 items; e.g. “[Company] provides me with sufficient training to handle the introduction of new products or services”), ‘developmental performance appraisal’ (3 items; e.g. “Performance appraisals include developmental feedback”), ‘contingent compensation and benefits’ (6 items; e.g. “Part of my compensation is based on how well I do my job”), and ‘participatory job design’ (10 items: e.g. “If there is a decision to be made, everyone is involved in it”). Using the literature of Jiang et al. (2012) I theorized that the ability-enhancing HRM system consisted of selective staffing and extensive training. In order to measure the motivation-enhancing HRM system I used the items regarding developmental performance appraisal and
contingent compensation and benefits. Furthermore, to measure the opportunity-enhancing HRM system the participatory job design items were used. Originally Liao et al. (2009) issued a 5-point Likert scale to measure their items, whereas Takeuchi et al. (2007) used a 7-point Likert scale. In order to ensure consistency within the study I chose to measure the items using a 5-point Likert scale ranging from “1 = strongly disagree” to “5 = strongly agree”. Moreover, Meijerink and Bos-Nehles (2016) did also use a 5-point Likert scale.

A factor analysis was conducted in order to assess whether the HRM practices could be seen as three separate HRM systems. Common factor analysis (also known as ‘principal factor analysis’ or ‘principal axis factoring’) was appropriate for this variable since the primary concern was to identify underlying dimensions. The results justified the suitability of a factor analysis as the Kaiser-Meyer-Olkin (KMO) measure was between 0.5 and 1 (0.815) and the Barlett’s test of sphericity was significant. Since the factors in the population are not expected to be strongly correlated an orthogonal rotation method (varimax) is used. Hair, Black, Babin and Anderson (2010, p.112) argued that at a sample size of 150, factor loadings of 0.45 are considered as significant (p < 0.05, power level of 80 percent). Therefore 0.45 was used as a cut-off point. The amount of factors retrieved from the factor analysis were determined based on the factor’s eigenvalue (i.e. the ‘latent root criterion’). Only the factors which yielded an eigenvalue greater than 1 were considered as significant. The factor analysis suggested a one-factor solution (eigenvalue = 2.67), arguing that HRM practices items were to be considered as one unidimensional variable instead of falling into three different HRM systems, as it was theorized. In the theoretical review I argued that the ability-, motivation-, and opportunity-enhancing HRM systems were defined as bundles of ability-, motivation-, and opportunity-enhancing HRM practices. All five HPWPs loaded significantly on this one factor (table 1). Furthermore a reliability analysis was run to assess the reliability of these sets of items, because of the fact that sum scores consist of true variance and random error. The reliability (Cronbach’s Alpha) was valued using the work of Peterson (1994). All five HPWPs demonstrated good or fair reliable scores in which deleting items would only lead to a small increase in reliability (table 1). The aggregated variable of the HRM system yielded a Cronbach’s Alpha of 0.773, in which deleting a HPWP would not lead to a higher reliability. Combining these results I will continue researching the relationship between the HRM system and employee attitudes whilst considering the HRM systems as one variable.

<table>
<thead>
<tr>
<th>HPWPs</th>
<th>Factor Loadings</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>0.748</td>
<td>0.776</td>
</tr>
<tr>
<td>Training</td>
<td>0.710</td>
<td>0.836</td>
</tr>
<tr>
<td>Appraisal</td>
<td>0.694</td>
<td>0.770</td>
</tr>
</tbody>
</table>
3.3.2 Employee Attitudes
As argued above, employee attitudes consist of job satisfaction and affective (organizational) commitment. Hence in order to measure employee attitudes, I had to measure both job satisfaction and affective commitment. Theoretically, both job satisfaction and affective commitment reflected an affective state of an employee. Whereas job satisfaction referred to the affective state towards the employee’s job and affective commitment referred to the affective state towards the organization (Hulin, 1991). A factor analysis was conducted to determine whether the items of job satisfaction and affective commitment showed enough common ground to be considered as one factor.

The items of job satisfaction were measured using a 5-point Likert scale, ranging from ‘1 = strongly disagree’ to ‘5 = strongly agree’. The items used to measure job satisfaction came from the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JSS) by Cammann, Fichman, Jenkins, and Klesh (1979, 1983). One major advantage of the MOAQ-JSS compared to, for example, the short-form of the Minnesota Satisfaction Questionnaire (MSQ; Weis, Dawis, England & Lofquist, 1967) was the length of the questionnaire (three items versus twenty items, respectively). Another advantage of this method was that it measured the affective component of job satisfaction (Bowling & Hammond, 2008). According to the presented theory, HRM practices are reciprocated through affective behaviour. These items measured job satisfaction at a general level instead of certain aspects of the job. Job satisfaction is often measured through multiple facets (e.g. Job Descriptive Index; Smith, Kendall & Hulin, 1969). Nevertheless, since we were interested in job satisfaction in general, and not certain aspects a general measurement was justified (Saari & Judge, 2004). Bowling and Hammond (2008) found acceptable levels of reliability and extensive evidence of the construct validity for the MOAQ-JSS. They argued that the MOAQ-JSS is a reliable and valid measure of global job satisfaction. Since, this research is aimed to measure the general job satisfaction instead of certain facets of job satisfaction, and the measure yields advantages over other methods, I used the MOAQ-JSS in this study. The items are; “All in all, I am satisfied with my job”, “In general, I like working here”, and “All things considered, I am satisfied with my current job”.

Affective commitment was measured using eight items from Allen and Meyer (1990); “I would be very happy to spend the rest of my career with this organization”, “I enjoy discussing my organization with people outside it”, “I really feel as if this organization’s problems are my own”, “I think that I

<table>
<thead>
<tr>
<th>Compensation</th>
<th>0.472</th>
<th>0.686</th>
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<tbody>
<tr>
<td>Participatory Job Design</td>
<td>0.594</td>
<td>0.744</td>
</tr>
</tbody>
</table>

Table 1 - Factor Loadings and Reliability
could easily become as attached to another organization as I am to this one”, “I do not feel like ‘part of the family’ at my organization”, “I do not feel 'emotionally attached' to this organization”, “This organization has a great deal of personal meaning for me”, and “I do not feel a strong sense of belonging to my organization”. These eight items are well aligned with the definition of affective commitment. Allen and Meyer (1990) demonstrated the difference between the items of the three components of commitment (namely; affective, continuance and normative commitment) using a factor analysis. Allen and Meyer (1990) found that the items did really represent three different phenomenon. Hence, this instrument is found to be appropriate to measure affective commitment.

The measurements of Allen and Meyer (1990) are intensively used in employee attitudes research, while showing high reliability scores (e.g. Yu & Egri, 2005). Allen and Meyer (1996) evaluated the measure, and provided considerable evidence regarding the construct validity and reliability. In addition, Gao-Urhahn, Biemann and Jaros (2016) used the scale of Allen and Meyer (1990) to test newer measures of affective commitment. Due its reliability and validity, combined with the fact that it perfectly fits the definitions used in this paper (and other papers used in this study), this measurement was used. Moreover, the size of this instrument is acceptable in this study. The items are measured using a 5-point Likert scale ranging from ‘1 = strongly disagree’ to ‘5 = strongly agree’. Originally, Allen and Meyer (1990) used a 7-point scale. However, I adopted a 5-point scale in order to constitute uniformity among the scales and making the questionnaire’s design more clear and structured for the respondents.

In the theory section I argued that employee attitudes consisted of two variables, namely; job satisfaction and affective commitment. These two concepts are both affective states in which job satisfaction refers to the employee’s affective state towards his or her job, while affective commitment refers to the affective state towards the organization (Hulin, 1991). Due to the fact that these variables both displayed affective employee attitudes, it was theorized that combined these variables would represent employee attitudes. The job satisfaction items consisted of; “All in all, I am satisfied with my job”, “In general, I like working here”, and “All things considered, I am satisfied with my current job”. And the affective commitment items were; “I would be very happy to spend the rest of my career with this organization”, “I enjoy discussing my organization with people outside it”, “I really feel as if this organization's problems are my own”, “I think that I could easily become as attached to another organization as I am to this one”, “I do not feel like 'part of the family' at my organization”, “I do not feel 'emotionally attached' to this organization”, “This organization has a great deal of personal meaning for me”, and “I do not feel a strong sense of belonging to my organization”.
In order to test this assumption, a factor analysis was conducted. As the goal of the analysis was to identify the underlying dimension, a common factor analysis was justified (Hair et al., 2010). Furthermore, as the factors were expected to be related an oblique rotation method was used (oblimin). The factor analysis demonstrated a KMO value of 0.828 and a significant Bartlett’s test of sphericity. Hence a factor analysis was justified. Despite the theory, the factor analysis did not provide conclusive results. The factor analysis suggested a three factor solution based on the latent root criterion (eigenvalue greater than one). The job satisfaction items did load on one factor, however they did also incorporate a couple of affective commitment items. The rest of the affective commitment items loaded on the other two factors. Despite the fact that the job satisfaction and affective commitment items did show some common ground, it is fair to say that these items did not represent one latent variable.

Since the factor analysis did indicate some kind of common variance between some items of job satisfaction and affective commitment, a correlation test was conducted to see how these variables would correlate once their items were combined. A reliability analysis on the items of job satisfaction demonstrated a Cronbach’s Alpha of 0.907 which is considered as highly reliable (Peterson, 1994). Deleting the item “In general, I like working here” would increase the reliability to 0.915. This item is measuring job satisfaction in a more broader sense, whereas the other two items are rather specifically measuring an employee’s job satisfaction (“All in all, I am satisfied with my job” and “All things considered, I am satisfied with my current job”). Since the increase in reliability is rather tiny, and because other studies indicated the suitability of this instrument as a whole, I decided to stick to the three items. Furthermore, the items of affective commitment demonstrated a Cronbach’s Alpha of 0.774 which is also considered as rather decent. Only deleting the item; “I think that I could easily become as attached to another organization as I am to this one”, would result in a slightly higher Cronbach’s Alpha (0.797). Even though this difference is greater than the difference between the job satisfaction Cronbach’s Alpha’s, I decided once again to keep the composition of the items for the same reasons. Because this instrument as whole has been found valid and reliable over time (e.g. Yu & Egri, 2005; Gao-Urhahn et al., 2016), and the increase in the Cronbach’s Alpha is also rather small, I did not delete that one particular item. In summary, new variables were created according to the theorized combination of items. Having these two variables, a correlation test was conducted in order to determine the common variance. Since both variables were considered as normally distributed (Hoyle, 1995), and a Pearson correlation was suitable. The Pearson correlation test indicated a significant (p < 0.01) correlation between job satisfaction and affective commitment of 0.55. The variables are not correlating perfectly, however it is fair to conclude that these variables are related to each other. Since the factor analysis indicated common ground for the items of the
employee attitude variables, and the correlation test pointed out a decent relation between the two variables, I decided to combine the variables job satisfaction and affective commitment into an employee attitude variable.

3.3.3 Psychological Contract Importance
As stated in the theoretical framework, I defined three dimensions of psychological contract importance. The items presented in the research of Kickul et al. (2001) aimed at measuring psychological contract breach on various aspects, and were measured on a 5-point scale. In this research I selected various aspects as presented by Kickul et al. (2001), and measured psychological contract importance on a 5-point scale ranging from “1 = not important at all” to “5 = extremely important”. The ‘ability-importance’ dimension of psychological contract importance grouped aspects of the psychological contract that were linked to the development of knowledge and skills, and includes the following items; ‘job training’, ‘opportunities for personal growth’, ‘opportunity to develop new skills’, and ‘continual professional training’. The ‘motivation-importance’ dimension grouped aspects regarding the need for feedback/guidance and motivation; ‘recognition of my accomplishments’, ‘opportunities for promotion and advancement’, ‘pay and bonuses tied to performance’, and ‘competitive salary’. The ‘opportunity-importance’ dimension grouped the psychological contract aspects that highlighted importance in autonomy; ‘participation in decision-making’, ‘freedom to be creative’, ‘a job that provides autonomy and control’, ‘enough resources to do the job’ and ‘adequate equipment to perform job’. The items of Kickul et al. (2001) have also been used by Restubog et al. (2013). Even though Restubog et al. (2013) split psychological contract importance in two group (transactional and relational aspects), the Cronbach’s alpha for their variables were rather decent (0.89 and 0.93, respectively). Nevertheless, in this study I chose to categorize the items of Kickul et al. (2001) in three psychological contract importance dimensions based on the resources the employees tend to develop or maintain.

Due to its novelty, this instrument is included with caution. A factor analysis is conducted to assure a great deal of information on this instrument. Based on the theory, I argued that psychological contract importance would yield three dimensions, namely; ability-importance, motivation-importance and opportunity importance. With ability-importance consisting of the following items; ‘job training’, ‘opportunities for personal growth’, ‘opportunity to develop new skills’, and ‘continual professional training’. The motivation-importance dimension was theorized to consist of; ‘recognition of my accomplishments’, ‘opportunities for promotion and advancement’, ‘pay and bonuses tied to performance’, and ‘competitive salary’. And lastly, the opportunity-importance dimension consisting of; ‘participation in decision-making’, ‘freedom to be creative’, ‘a job that provides autonomy and control’, ‘enough resources to do the job’ and ‘adequate equipment to perform job’. A factor analysis
was conducted in order to assess whether the theorized aspects of the psychological contract importance were suitable to be considered as bundles which represented the dimensions. As explained above, common factor analysis was used since the goal was to identify underlying dimensions behind the aspects of the psychological contract importance. The results of the factor analysis indicated a KMO of 0.826 and the Barlett’s test of sphericity was significant. As with the other variables within this study, factor loadings above 0.45 were considered as significant (Hair et al. (2010, p.112), and the latent root criterion was used to determine the amount of retrieved factors. Moreover, the factors were rotated using the varimax procedure, as the factors are not expected to be strongly correlated to each other. Given these conditions the factor analysis resulted in a three factors solution which slightly diverged from the theorized composition of the dimensions (table 2).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>4.938</td>
<td>1.550</td>
<td>1.271</td>
</tr>
<tr>
<td>% of Variance</td>
<td>37.986</td>
<td>11.924</td>
<td>9.780</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>37.986</td>
<td>49.910</td>
<td>59.690</td>
</tr>
</tbody>
</table>

**Factor loadings of items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Training</td>
<td>0.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for personal growth</td>
<td>0.822</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity to develop new skills</td>
<td>0.850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continual professional training</td>
<td>0.489</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for promotion and advancement</td>
<td>0.548</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay and bonuses tied to performance</td>
<td></td>
<td>0.588</td>
<td></td>
</tr>
<tr>
<td>Competitive salary</td>
<td></td>
<td>0.457</td>
<td></td>
</tr>
<tr>
<td>Participation in decision-making</td>
<td></td>
<td>0.579</td>
<td></td>
</tr>
<tr>
<td>A job that provides autonomy and control</td>
<td></td>
<td>0.602</td>
<td></td>
</tr>
<tr>
<td>Enough resources to do the job</td>
<td></td>
<td></td>
<td>0.782</td>
</tr>
<tr>
<td>Adequate equipment to perform job</td>
<td></td>
<td></td>
<td>0.926</td>
</tr>
</tbody>
</table>

Table 2 - Eigenvalues and Factor Loadings of the Factors

The first factor did indeed group the items ‘job training’, ‘opportunities for personal growth’, ‘opportunity to develop new skills’, and ‘continual professional training’. However, it did also include an item that was theorized to be considered as part of the motivational dimension, namely; ‘opportunities for promotion and advancement’. Despite the fact that promotion-related HRM practices are considered as motivation-enhancing practices, it is not that strange that employees that yield an high importance on ‘opportunities for personal growth’ would also demonstrate a high importance on ‘opportunities for promotion and advancement’. These employees want to develop
themselves and grow. These employees would then logically also show importance on ‘opportunities for promotion and advancement’. According to the factor analysis, this item is rather a development aspect, than a motivational aspect. This factor is defined as a variable that demonstrates the importance an employee attaches to personal growth in the form of development of skills and knowledge, as well as advancement in their career. Since the dimension is broader than only the development of skills and knowledge, I changed the name of this factor/dimension to ‘development and growth-importance’.

The second factor did group items that were considered as motivational aspects; ‘pay and bonuses tied to performance’ and ‘competitive salary’. As argued above, ‘opportunities for promotion and advancement’ are loaded on the first factor and is thus excluded here. Furthermore, ‘recognition of my accomplishments’ did not load on this factor. This item scored an average of 4,32 (out of 5) and can be seen as an item that is very important to almost every employee, whereas the other motivational aspects showed a lower average (e.g. competitive salary 2,99/5). Hence ‘recognition of my accomplishments’ was dropped from this dimension. Moreover, the items ‘participation in decision-making’ and ‘a job that provides autonomy and control’ loaded on the second factor, whereas they were theorized to be a characteristics for the opportunity-dimension. Despite the fact that these aspects were theorized to fit the opportunity-dimension, both items have been linked to motivation on multiple occasions in the past. Lawler (1969) argued that participation in decision making could lead to increased motivation of the employee as they committed themselves (more) to organizational goals. Moreover, Bhatti and Qureshi (2007) claimed that participation in decision-making can satisfy employees’ self-actualizations needs, which in turn would make an employee more motivated. Though these theories approached the relationship between participation in decision-making and motivation differently, they both provided a logical explanation why participation in decision-making is linked to motivation and thus loaded on the motivational dimension of psychological contract importance. Furthermore, autonomy has also been linked to motivation before. The job characteristics model of Hackman and Oldham (1976) found that a job with higher levels of autonomy was linked to a higher motivation. They theorized that high autonomy increased the dependency on the employee’s efforts, which made the employee feel a strong sense of personal responsibility for the failures and successes of the firm. And due to this attitude, the employee would be more motivated in his job (Hackman & Oldham, 1976). Hence, both participation in decision-making and autonomy are linked to motivation in previous papers. Therefore I included these two aspects into this dimension as the factor analysis suggested. As argued in the theory section of this paper, the motivational dimension referred to the importance an employee attaches to motivating incentives which could be provided by the employer.
Lastly, the third factor was expected to load opportunity-dimension aspects. As explained above, ‘participation in decision-making’ and ‘a job that provides autonomy and control’ loaded on the second factor. In the theory section I argued that these job design aspects would load on the opportunity-importance dimension, however as the factor analysis elicited these items are found to be motivational-aspects. Furthermore, ‘freedom to be creative’ did not show a significant factor loading and was therefore excluded from this dimension. Therefore, the third factor only consisted of ‘enough resources to do the job’ and ‘adequate equipment to perform job’. These items are rather similar in essence, and they do represent the opportunity-dimension quite well. Hence the opportunity-dimension came out less broad than was theorized. The opportunity-dimension referred to the importance an employee demonstrates regarding the availability of resources and equipment to perform their jobs.

I researched the reliability of these sets of item in order to assess the degree of true variance versus random error within the dimensions. The development- and growth-importance dimension demonstrated reasonable inter-item correlations, and the Cronbach’s Alpha appeared to be 0.835. This Cronbach’s Alpha is quite good (Peterson, 1994), and elicited that there is little random error. Furthermore, deleting one or more items would not have led to a higher Cronbach’s Alpha. Therefore the five items remained as aspects of the dimension. The motivation-importance dimension showed a lower Cronbach’s Alpha (0.657) and lower inter-item correlations between the items. However, deleting one or more items would not have led to a more reliable factor. Though 0.657 is considered as a low score according to Peterson (1994), 0.7 was considered as ‘acceptable’. Therefore, I continued to group the same items. Though, it must be noted that a relatively high level of random error was present in this factor. Thirdly, the opportunity-importance dimensions demonstrated a Cronbach’s Alpha of 0.877 and high inter-item correlations. Since the essence of these items are rather similar, this was not such a surprise. Yet it was a confirmation that these items would show little random error once grouped. Hence the reliability analysis of the development- and growth-importance dimension and the opportunity-importance produced good scores. However, the motivation-importance dimension demonstrated a lower reliability, and therefore would incorporate more random error.

<table>
<thead>
<tr>
<th>Development- and growth-importance aspects</th>
<th>Motivation-importance aspects</th>
<th>Opportunity-importance aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Training</td>
<td>Pay and bonuses tied to performance</td>
<td>Enough resources to do the job</td>
</tr>
<tr>
<td>Opportunities for personal growth</td>
<td>Competitive salary</td>
<td>Adequate equipment to perform job</td>
</tr>
<tr>
<td>Opportunity to develop new skills</td>
<td>Participation in decision-making</td>
<td></td>
</tr>
</tbody>
</table>
Continual professional training | A job that provides autonomy and control
Opportunities for promotion and advancement

| Table 3 - Psychological Contract Importance Dimensions

3.4 Control Variables

3.4.1 Trust in Management
In the literature regarding the reciprocation of HRM practices through employee attitudes trust has been found as a moderating variable (e.g. Gould-Williams & Davies, 2014). The definition of trust varies per perspective (e.g. economists, psychologists), however according to Innocenti et al. (2011, p.305) trust regards; “the perception or belief by employees that their employers will act upon their words”. Renzl (2008) argued that the definition of trust itself is not that clear in the existing body of literature. Furthermore, Renzl (2008) redefined trust as; “the belief in, and willingness to depend on, another party”. The latter introduced definition grants us a broader definition of trust in management, which goes beyond ‘acting upon their words’. According to the literature, trust in management moderates the relationship between inducements by the employer (HRM practices) and the employees’ attitudes, because trust in management influences the employees’ perceptions of the inducements (Alfes, Shantz & Truss, 2012). Hence, the trust-climate or context moderates the effect of the HRM practices on employee attitudes. For example, in a situation where there is mistrust, employees may interpret the HRM practices as less favourably compared to a context of high trust, which causes diminishes the positive effect of HRM practices on employee attitudes. In order to control for this moderating effect, I included trust as a control variable in this study. I used the instrument as used in the Workplace Employment Relations Survey (WERS, 2004), as retrieved from Forth, Bewley and Bryson (2008). This instrument fitted both the definitions of Innocenti et al. (2011) and Renzl (2008), while still remaining practical since the instrument had only four items. Furthermore, the instrument of the WERS has been based on 14,724 employees spread across small, medium and large firms in the UK and yields high reliability (Forth et al., 2008). Moreover, the instrument or its data has been used multiple times (e.g. Brown, Gray, McHardy & Taylor, 2015). The following items are used to measure trust in management; ‘Managers here…’; ‘…can be relied upon to keep their promises’, ‘...are sincere in attempting to understand employees’ views’, ‘...deal with employees honestly’, ‘...treat employees fairly’. These items were measured using a 5-point Likert scale ranging from ‘1 = strongly disagree’ to ‘5 = strongly agree’. A reliability analysis of this variable indicated a Cronbach’s Alpha of 0.920, which suggested the presence of just little random variance within this variable. Moreover, deleting items would not lead to an increase in the reliability.
3.4.2 Contract Type
In this study I also controlled for the effect of the contract type. The contract type was measured on basis of the amount of working hours per week. I needed to control for contract type because it could have had implications on the interaction of the employees with HRM practices. In short, full-time employees and part-time employees probably engage in different HRM practices, and yield different perceptions of HRM practices (Meijerink & Bos-Nehles, 2016).

3.5 Reliability and validity of the Research Design
As argued above, the creation of the questionnaire has happened with care. A proper data collection method was selected in order to secure methodological fit (Edmondson & McManus, 2007). Furthermore, the instruments selected for this questionnaire were firmly analyzed in order to determine their suitability for this study. To assure this, I looked at their reliability, validity, theoretical fit (e.g. definition), ease and length of answering (e.g. type of item, difficulty of the items, and amount of items). As I argued above, the questionnaire was tested by a panel (see section 3.2). Since this panel consisted of two students and three employees, I received input on various perspectives. This appreciation of the data collection method provided a questionnaire that was better able to collect valid and reliable data. It also revealed some limitations, which will be discussed further on in this paper. Moreover, as all the participants of this survey received the same questionnaire, the same way, reliability of the survey was even more secured.

3.6 Operationalization Table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Measure</th>
<th>Scale</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM System</td>
<td>Independent</td>
<td>Meijerink &amp; Bos-Nehles (2016)</td>
<td>Likert (5-point)</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Employee Attitudes:</td>
<td>Dependent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Dependent</td>
<td>Cammann, Fichman, Jenkins &amp; Klesh (1979,</td>
<td>Likert (5-point)</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Affective Commitment</td>
<td>Dependent</td>
<td></td>
<td>Likert (5-point)</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Psychological Contract Importance</td>
<td>Moderator</td>
<td>Kickul, Neuman, Parker &amp; Finkl (2001)</td>
<td>Likert (5-point)</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Trust in Management</td>
<td>Control</td>
<td>Workplace Employment Relations Survey (2004)</td>
<td>Likert (5-point)</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Contract Type</td>
<td>Control</td>
<td>Meijerink &amp; Bos-Nehles (2016)</td>
<td>Amount of hours per week</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Table 4 - Operationalization of the Variables

3.7 Data Analysis
The book Hair et al. (2010) presented a decision-framework which demonstrated which multivariate technique is justified per scenario. In order to assess the relationship between the three bundles of HRM practices and employee attitudes a dependence technique was recommended. And since there
was only one dependent variable and solely metric variables, a multiple regression analysis was justified (Hair et al., 2010, p.13). Multiple regression analysis was used to predict the change in the dependent variable (employee attitudes) in response to changes in the independent variable(s) (bundles of HRM practices). The regressions analysis was conducted using SPSS.

In order to test for common method variance, a Harman’s single factor test was conducted. The factors in the results were not allowed to exceed the level of 50 percent of the total explained variance (Chang, Van Witteloostuijn & Eden, 2010). Podsakoff, MacKenzie, Lee and Podsakoff (2003, p.879) argued that method biases are one of the main sources of measurement error. I did not directly expect to find common method variance, however testing this quickly could do no harm. Even though this test could not control for common method variance, it was certainly useful to do because of the setting of the data collection. For example, the survey was conducted in one round, one moment in time, using only one method, while the participants were self-administering the survey in anonymity. Hence this test is not necessary, but it is an addition. The results indicated that only 20.67% of the variance could be explained by one factor, which indicated that there was no direct indication for the presence of common method bias.

Moreover, the collected data regarding the various variables needed to be merged in order conduct a multiple regression analysis. 61 items were measured using a 5-point scale resulting in digits varying between 1 and 5. Some items were measured and scored in reverse. Hence, these items had to be reversed in order for the numbers to make sense. Furthermore, multiple items were used to measure a certain variables. In order to calculate the data for that variable a new variables were constructed by calculating an average of the items regarding that variable. Hence, per variable the scores per item were added, and then divided by the amount of items belonging to that variable. Consequently the following variables were constructed through this method; ability-importance, motivation-importance, opportunity-importance, job satisfaction, affective organizational commitment, and trust in management. Furthermore, job satisfaction and affective organizational commitment were merged into employee attitudes, taking the average of the both variables and dividing it by two. This was done after the mentioned factor analysis. The item regarding ‘hours worked per week’ remained as it was perceived since this ratio variable was measured using only one item.
4. Results

4.1 Descriptive Statistics and Correlation Matrix

Table 5 displays the mean and standard deviation of our variables. These results indicated no direct surprises. The mean of the HRM practices is the lowest regarding the variables with a 5-point scale. Furthermore, the mean of employee attitudes indicated that the 160 employees on average are rather satisfied with their job, and feel committed to their organization. When looking at the psychological contract importance of these employees we found that opportunity-importance was seen as the most important dimension, followed by the development- and growth-importance, and lastly the motivational-importance. Yet it is no surprise that the employees demonstrated a high importance regarding the availability of enough resources and equipment to perform their job (i.e. opportunity-importance). Moreover, the degree of trust in management is rather good among the participants. Lastly, the amount of labour hours per week is a little higher than the country’s average of 31 hours per week (CBS). However this CBS average did not include hours due to overtime or other unpaid hours. This might explain why the average of this sample is a little higher than the average. The standard deviation of the variable indicated that the amount of labour hours per week per employee is rather diverging. Yet, as indicated earlier in section 3.1, the distribution of the sample is rather comparable with the population within the Netherlands.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM System</td>
<td>2.7728</td>
<td>0.42591</td>
</tr>
<tr>
<td>Employee Attitudes</td>
<td>3.6256</td>
<td>0.57698</td>
</tr>
<tr>
<td>Development- and Growth-Importance</td>
<td>4.0238</td>
<td>0.60412</td>
</tr>
<tr>
<td>Motivational-Importance</td>
<td>3.4047</td>
<td>0.63622</td>
</tr>
<tr>
<td>Opportunity-Importance</td>
<td>4.3594</td>
<td>0.62488</td>
</tr>
<tr>
<td>Trust In Management</td>
<td>3.7375</td>
<td>0.86275</td>
</tr>
<tr>
<td>Amount of hours per week</td>
<td>32.7984</td>
<td>10.46635</td>
</tr>
</tbody>
</table>

Table 5 - Mean and Standard Deviation per Variable

Looking at the correlation matrix (table 6) it is apparent to see that a lot variables are correlating highly. For example, employee attitudes are indicated to correlate highly with HRM system \( r = 0.520, p < 0.01 \) and trust in management \( r = 0.498, p < 0.01 \). And to a small extend to development- and growth-importance \( r = 0.183, p < 0.05 \) and opportunity-importance \( r = 0.189, p < 0.05 \). The HRM system is also fairly, yet significantly, correlating with the three dimensions of psychological contract importance. In which development- and growth-importance is the highest correlating variable \( r = 0.316, p < 0.01 \), followed by motivation-importance \( r = 0.219, p < 0.01 \) and thirdly opportunity-importance \( r = 0.186, p < 0.05 \). Moreover, the HRM system and trust in management are also highly correlating \( r = 0.631, p < 0.01 \). Lastly, the amount of labour hours are
not correlating to any other variable on a significant level (p < 0.05). The multiple regression analysis will give us a better understanding of the relations between the variance of variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>(N=160)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) HRM System</td>
<td></td>
<td>1</td>
<td>0.520**</td>
<td>0.316**</td>
<td>0.219**</td>
<td>0.186*</td>
<td>0.631**</td>
<td>-0.033</td>
</tr>
<tr>
<td>(2) Employee Attitudes</td>
<td></td>
<td>0.520**</td>
<td>1</td>
<td>0.183*</td>
<td>0.121</td>
<td>0.189*</td>
<td>0.498**</td>
<td>0.034</td>
</tr>
<tr>
<td>(3) Development and Growth-Importance</td>
<td></td>
<td>0.316**</td>
<td>0.183*</td>
<td>1</td>
<td>0.485**</td>
<td>0.394**</td>
<td>0.150</td>
<td>-0.106</td>
</tr>
<tr>
<td>(4) Motivational-Importance</td>
<td></td>
<td>0.219**</td>
<td>0.121</td>
<td>0.485**</td>
<td>1</td>
<td>0.225**</td>
<td>-0.031</td>
<td>0.076</td>
</tr>
<tr>
<td>(5) Opportunity-Importance</td>
<td></td>
<td>0.186*</td>
<td>0.189*</td>
<td>0.394**</td>
<td>0.225**</td>
<td>1</td>
<td>0.093</td>
<td>-0.030</td>
</tr>
<tr>
<td>(6) Trust In Management</td>
<td></td>
<td>0.631**</td>
<td>0.498**</td>
<td>0.150</td>
<td>-0.031</td>
<td>0.093</td>
<td>1</td>
<td>-0.096</td>
</tr>
<tr>
<td>(7) Amount of hours per week</td>
<td></td>
<td>-0.033</td>
<td>0.034</td>
<td>-0.106</td>
<td>0.076</td>
<td>-0.030</td>
<td>-0.096</td>
<td>1</td>
</tr>
</tbody>
</table>

* = Significant correlation (p < 0.05)
** = Significant correlation (p < 0.01)

Table 6 - Correlation between the Variables

4.2 Hypotheses Testing
In the theory section I argued that psychological contract importance affects the relationship between the HRM system and employee attitudes. This influence could (partially) explain the diverging results found in research regarding the relationship between the HRM system and employee attitudes. Following the results of the factor analysis on the HRM practices, it became clear that HRM practices were to be considered as one variable instead of the theorized three HRM systems. Furthermore, three dimensions of psychological contract importance were theorized; ability-importance, motivation-importance and opportunity importance. The factor analysis categorized the items within these dimensions. Despite the fact that the HRM system was not found to be three bundles of HRM practices, the psychological contract importance dimensions are still expected to moderate the relationship between the HRM system and employee attitudes. Hence, the theorized model remained with small adjustments (see table 6).

Because the hypotheses were based on the theoretical framework, I needed to review the hypotheses as well. Hypotheses 1, 2 and 3 were stated that the three HRM systems would be positively related to employee attitudes. Moreover, hypotheses 4, 5 and 6 argued the positively moderating effect of the three psychological contract importance dimensions on the relationship.
between the three HRM systems and employee attitudes. Given the updated theoretical model I created new hypotheses:

Hypothesis A: The HRM system is positively related to employee attitudes.

Hypothesis B: The ability-importance dimension of the psychological contract positively affects the relationship between the HRM system and employee attitudes.

Hypothesis C: The motivation-importance dimension of the psychological contract positively affects the relationship between the HRM system and employee attitudes.

Hypothesis D: The opportunity-importance dimension of the psychological contract positively affects the relationship between the HRM system and employee attitudes.

Using this updated versions of the previously stated hypothesis I will be able to answer the research question.

Before starting the multiple regression analysis a couple of assumptions were controlled for. The sample size in this study (N=160) is of a decent size to find significant effects on a decent significance level. It did also exceed the generalizability ratio of five observations for every independent variable in the equation. Furthermore, the plotted residuals did not show any abnormalities.

In this multiple regression analysis, three models were tested. The first model tested the relationship between the control variables (amount hours worked, and trust in management) and employee attitudes. The second model included the HRM system in explaining the variance of employee attitudes. Lastly, the third model accounted for the moderating effect of psychological contract importance on the relationship between the HRM system and employee attitudes. Using the results of model 2 I was be able to answer hypothesis A, and by using the results of model 3 I was able to answer hypotheses B, C and D.
4.2.1 Model one
The first regression model only included the control variables. The results of the multiple regression analysis indicated that trust and the amount of hours an employee works in an organization account for 25.4 per cent of the variance in employee attitudes. In which only trust in management has a significant, positive effect on employee attitudes ($\beta = 0.506, p < 0.001$). The unique variance explained in employee attitudes by the amount of hours worked is little, and not significant. Hence, the degree of trust in management is rather well explaining the variance in employee attitudes in this model. This result was also expected since the correlation between these two variables is rather high ($r = 0.498, p < 0.01$). As expected the collinearity statistics did not put forward any issues as the tolerance levels were higher than 0.1 and variance inflation factor (VIF) was below 10 (Hair et al., 2010).

4.2.2 Model two
As explained above, the second model incorporated the impact of the HRM system. The results indicated that model two explained 34.8 per cent of the variance in employee attitudes ($p < 0.001$). Hence this model yielded a 9.4 per cent higher explained variance compared to model one. Furthermore, the increase in the predictive capability (F-value) of model two compared to model one is also found to be highly significant ($p < 0.001$). However, the beta coefficients are not evenly distributed over the predictors. Once the HRM system was included the beta coefficient of trust decreased from 0.506 in model one to 0.256 in model two ($p < 0.005$). This implied that the unique variance of employee attitudes that was previously linked to trust was reduced because of the introduction of the other variables. The amount of hours worked was still found as irrelevant in predicting employee attitudes. The HRM system was found to be a predictor of employee attitudes ($\beta = 0.395, p < 0.001$). Multicollinearity was also found to be no issue here. Hence the results of regression model two suggested that both trust and the HRM system were found to be significant predictors of employee attitudes. These results provided support for hypothesis A, which stated that the HRM system was positively related to employee attitudes.

4.2.3 Model three
Lastly, in model three the moderation effect of psychological contract importance was introduced into the model. Aggregated, the predictors in the model explain 37.3 per cent of the variance in employee attitudes. Model three as a whole is a significant model of predictors ($p < 0.001$). Despite the 2.4 per cent increase in explained variance, compared to model two, the increase in predictive capability of the model is not found to be significant ($p = 0.119$). Multicollinearity statistics did again show no issues. Trust and the HRM system were still found to be significant predictors of employee attitudes (respectively; $\beta = 0.279, p < 0.01$ and $\beta = 0.395, p < 0.01$). This implied that the interaction
variables surely did not replace the direct relationship between the HRM system and employee attitudes, and therefore psychological contract importance is no mediating variable. Hypothesis B stated that the development- and growth-importance dimension of the psychological contract would positively affect the relationship between the HRM system and employee attitudes. The interaction variable of the development- and growth-importance and HRM system was found to be a significantly related to employee attitudes ($\beta = -0.166, p < 0.05$). However, the direction of the relationship was expected to be positive instead of negative. This negative moderation effect is illustrated in figure 7. When an employee yields a relatively high development- and growth-importance, an increase in HRM system would lead to relatively lower employee attitudes. In other words, the HRM practices lead to a higher level of employee attitudes among employees with a lower level of development- and growth-importance compared to employees with a higher level of development- and growth-importance. These results are arguing the opposite of what was theorized before. In the discussion section I will attempt to provide arguments which could explain this unexpected negative moderation effect. Thus, despite the fact that development- and growth-importance was found to be a significant moderating variable on the relationship between the HRM system and employee attitudes, there is no support found for hypothesis B.

Hypothesis C argued that the motivation-importance dimension of psychological contract importance would positively affect the relationship between the HRM system and employee attitudes. The results indicated a slightly positive, yet not significant, relationship between the interaction variable and employee attitudes ($\beta = 0.002, p = 0.982$). Hence meaning that the results of the multiple regression analysis failed to provide support for hypothesis C. Further unexpected results came from the interaction variable of opportunity-importance and the HRM system. The regression analysis did not demonstrate the theorized moderating effect of the interaction variable ($\beta = 0.018, p = 0.803$).
This implied that the results did not find support for hypothesis D which argued that opportunity-importance would positively affect the relationship between the HRM system and employee attitudes. In summary, the regression model argued that development- and growth-importance did moderate the relationship between the HRM system and employee attitudes. However, hypothesis B argued that this moderating effect would be positive, whereas the results indicated a negative moderating effect. Therefore, the regression analysis did not provide support for hypothesis B. Furthermore, the results also failed to provide support for hypothesis C and D as no significant relationship was found. The results are summarized in table 7.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th>Model 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>β</td>
<td>s. e.</td>
<td>Beta</td>
<td>Sig.</td>
<td>β</td>
<td>s. e.</td>
<td>Beta</td>
<td>Sig.</td>
<td>β</td>
</tr>
<tr>
<td></td>
<td>2.213</td>
<td>0.227</td>
<td>0.000**</td>
<td>2.892</td>
<td>0.256</td>
<td>0.000**</td>
<td>2.815</td>
<td>0.256</td>
<td>0.000**</td>
</tr>
<tr>
<td>Trust</td>
<td>0.338</td>
<td>0.046</td>
<td>0.506</td>
<td>0.000**</td>
<td>0.171</td>
<td>0.056</td>
<td>0.003**</td>
<td>0.187</td>
<td>0.056</td>
</tr>
<tr>
<td>Amount of hours</td>
<td>0.005</td>
<td>0.004</td>
<td>0.082</td>
<td>0.236</td>
<td>0.003</td>
<td>0.004</td>
<td>0.052</td>
<td>0.424</td>
<td>0.004</td>
</tr>
<tr>
<td>HRM System</td>
<td></td>
<td></td>
<td></td>
<td>0.481</td>
<td>0.101</td>
<td>0.395</td>
<td>0.000**</td>
<td>0.485</td>
<td>0.102</td>
</tr>
<tr>
<td>HRM Practices x Development- and Growth-Importance</td>
<td></td>
<td></td>
<td></td>
<td>-0.319</td>
<td>0.150</td>
<td>-0.166</td>
<td>0.035*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM Practices x Motivation-Importance</td>
<td></td>
<td></td>
<td></td>
<td>0.003</td>
<td>0.146</td>
<td>0.002</td>
<td>0.982</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM Practices x Opportunity-Importance</td>
<td></td>
<td></td>
<td></td>
<td>0.034</td>
<td>0.136</td>
<td>0.018</td>
<td>0.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.254</td>
<td></td>
<td></td>
<td>0.348</td>
<td></td>
<td></td>
<td>0.373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.254</td>
<td></td>
<td></td>
<td>0.094</td>
<td></td>
<td></td>
<td>0.024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>26.780</td>
<td></td>
<td></td>
<td>27.815</td>
<td></td>
<td></td>
<td>15.162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>26.780**</td>
<td></td>
<td></td>
<td>22.537**</td>
<td></td>
<td></td>
<td>1.983</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 160; β = unstandardized coefficient; Std. Error = standard error; Beta = standardized coefficient
* = p < 0.05; ** = p < 0.01

Table 7 - Summarized results of the multiple regression analysis
5. Discussion

5.1 Multiple Regression Analysis

Due to findings of the factor analysis the initial model and hypotheses were adjusted. In the multiple regression analysis hypothesis A, B, C and D were tested. The results of the regression analysis indicated that trust and the HRM system were found to be significant predictors of employee attitudes (respectively; $\beta = 0.279, p < 0.01$ and $\beta = 0.395, p < 0.01$). The amount of hours an employee is working per week did not seem to be relevant here. Thus, this study provided support for the claim that HRM system lead to increased employee attitudes. Therefore, hypothesis A was accepted, which was in line with other researchers. For example, Innocenti et al. (2011) found a significant effect of the HRM system on employee attitudes in general ($\beta = 0.13, p < 0.01$). However, despite the fact that both this study and the study of Innocenti et al. (2011) found significant results, the strength of the relationship is still rather divergent. And in order to understand the relationship between the HRM system and employee attitudes (and performance) it remains important to understand why these results can be so divergent. In this study I assessed the influence of psychological contract importance as a moderating variable in the relationship between the HRM system and employee attitudes. The results of the multiple regression analysis argued that the development- and growth-dimension of psychological contract importance was indeed moderating the relationship between the HRM system and employee attitudes ($\beta = -0.166, p < 0.05$). Due to the fact that hypothesis B claimed a positive moderating effect of the development- and growth-dimension, this hypothesis was rejected. Furthermore, as it was observed that development- and growth-importance significantly moderated the relationship in a negative manner, the opposite was found to be true. This finding was rather surprising as it was expected that the HRM system would lead to higher employee attitudes when an employee yielded a higher degree of development- and growth-importance. As this negative moderation effect is significant it became relevant to understand what might have cause this effect. Because of the fact that I did not research the origins of this effect, I could only attempt to grasp an understanding of this phenomenon. In doing so, I stumbled upon a few possible explanations. Firstly, it could have been possible that employees with high and employees with low levels of development- and growth-importance had other expectations of the HRM department or of the offered HRM practices. This effect can be easily backed by theory once we consider HRM practices as ‘services’. Research on service quality argued that service quality is measured by comparing the customer’s expectation of the service to the perceived service quality (e.g. Grönroos, 1984). In this case, the satisfaction derived from these services is found to be related to the confirmation or disconfirmation of expectations (Oliver, 1980). Translated to this context it implies that the value of a HRM practice to an employee depends on the expectations that employee
had of that HRM practice. Consequently, the degree of reciprocity depends on the degree of value it yields to an employee. As illustrated in figure 7, both the employees with high and low levels of development- and growth-importance demonstrated an increase in employee attitudes as the amount of HRM practices increased. However, this relationship was relatively stronger among employees with a lower level of development- and growth-importance. The service quality theory can be used to explain this effect. When employees have lower expectations of the HRM practices then they would lead to a relatively higher degree of service quality compared to employees with higher expectations. This could explain why employees with a lower level of development- and growth-importance are showing relatively higher employee attitudes as a result of implemented HRM practices.

Secondly, it is possible that employees were promised ‘better’ or ‘other’ HRM practices, but these obligations were not fulfilled by the employer. Going back to the concept of psychological contract, it becomes logical that when an employer is failed to fulfil his or her promises that psychological contract breach occurs. Moreover, after the cognitive perception of such a breach, psychological contract violation occurs (Morrison & Robinson, 1997). Many studies researched the outcomes of psychological contract violation. Among other things, a decrease in job satisfaction (e.g. Robinson & Rousseau, 1994) and of organizational commitment (e.g. Guzzo, Noonan & Elron, 1994) is found in multiple studies. Hence, when an employer is unable to fulfil the obligations within the psychological contract, psychological contract breach can lead decreased employee attitudes. However, why would this effect merely affect the employees that demonstrated a higher level of development- and growth-importance? Restubog et al. (2013) argued that employees that demonstrated higher levels of psychological contract importance experienced higher degrees of psychological contract violation. Coyle-Shapiro and Kessler (2000) argued that the importance an employee attaches to certain promises increased the saliency of psychological contract breach. In this case the social exchange theory seems to work in reverse as the poor or absence of inducements tend to cause negative employee attitudes. Thus, when employers fail to fulfil their promises towards employees it will cause a greater decrease in employee attitudes among employees with a higher level of psychological contract importance, compared to an employee with lower levels of psychological contract importance. The employees with a lower level of development- and growth-importance do experience less psychological contract violation. This effect does not imply that HRM practices lead to a decrease in employee attitudes. However, this could explain why employees with a higher level of development- and growth-importance show a relative smaller increase in employee attitudes as they experience a higher level of psychological contract violation. Restubog et al. (2013) argued that importance regarding relational aspects (e.g. training and professional development) had the
greatest impact on feelings of psychological contract violation. The aspects which I defined as development- and growth-importance can be considered to be relational aspects of the psychological contract importance. This finding could therefore explain why this effect was only present among the development- and growth-importance dimension.

Thirdly, the Herzberg two-factor theory (Herzberg, 1959) can be used to explain why an increase of HRM practices would not necessarily lead to an increase in employee attitudes. The Herzberg two-factor theory distinguishes two sets of job factors; motivators and hygiene factors. These job factors (e.g. job design, salary, benefits) are all HRM related factors that can be implemented by or controlled through HRM practices within the HRM system. Without discussing the sets of factors, his idea behind this separation is rather applicable in this situation. Herzberg (1959) argued that motivators cause positive satisfaction among employee, whereas their absence would not necessarily lead to dissatisfaction. Hygiene factors on the other hand do not necessarily lead to satisfaction when present, but will dissatisfy employees once they are absent. Translating this theory to our current context, it implies that implementing more HRM practices would not necessarily lead to a higher level of employee attitudes. Other researchers claimed that job factors might be perceived as a satisfier or a dissatisfier based on the individual’s frame of reference (House & Wigdor, 1967). Meaning that a HRM practice can be perceived as a motivator to one employee, and as a hygiene factor to another employee. Hence this could imply that employees with a higher degree of development- and growth-importance yield a different perspective on what is perceived as a motivator or as a hygiene factor. Therefore HRM practices could lead to higher employee attitudes when they are valued as motivators.

As the results did not provide support for a moderating effect of the other two psychological contract importance dimensions, hypothesis C and D were rejected. However, why does only development- and growth-importance show up as a moderating variable, whereas motivation-importance and opportunity-importance are not? The same two-factor theory of Herzberg (1959) can be applied to provide an explanation here. Table 9 is summarizing the factors of Herzberg’s two-factor theory, table 3 summarized the aspects within the dimensions of psychological contract importance. The aspects of the development- and growth-importance dimension are related to motivation factors. When these ‘needs’ are fulfilled, they will result in increased employee attitudes. However, the aspects of the motivation-importance and opportunity-importance dimensions can be categorized as hygiene factors. And because these hygiene factors are not resulting in employee attitudes once they are fulfilled. Thus, whether employees yield high or low importance on both the motivational-importance and opportunity-importance, it is reasonable to understand that these dimensions were
not significantly moderating the relationship between the HRM system and employee attitudes once these HRM practices are offered.

<table>
<thead>
<tr>
<th>Motivation Factors</th>
<th>Hygiene Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advancement</td>
<td>Interpersonal relationship</td>
</tr>
<tr>
<td>Work itself</td>
<td>Salary</td>
</tr>
<tr>
<td>Possibility of growth</td>
<td>Policies and administration</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Supervision</td>
</tr>
<tr>
<td>Recognition</td>
<td>Working conditions</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
</tr>
</tbody>
</table>

Table 8 - Summary of the factors of Herzberg’s two-factor theory as retrieved from Alshmemri, Shahwan-Akl & Maude (2017)

Nevertheless, these recently provided theories are not yet tested. It can only grant us possible explanations of the findings. Future studies might include certain variables that control or test these theories in their studies on this topic. However, as far as this study demonstrated the impact of psychological contract importance on the relationship between the HRM system and employee attitudes is not enormous. Only one of the three tested dimensions of psychological contract importance was found to moderate the relationship in a significant way. This implies that including the three dimensions of psychological contract importance only slightly explains the variance found in the relationship between the HRM system and employee attitudes. And this negative moderation effect might even be caused by the expectations employees had. Hence, psychological contract importance is not really explaining the variance. This study did validate the importance of trust, as this it was found to be a significant predictor of employee attitudes ($\beta = 0.279, p < 0.01$). Yet, other factors might be better in explaining the variance found between the results of the studies researching the relationship between the HRM system and employee attitudes. For example, the perspective from where HRM practices are measured was found to affect the relationship between the HRM system and employee attitudes. In the beginning of the discussion section I compared the results of this study with the results of Innocenti et al. (2011) regarding the relationship between the HRM system and employee attitudes. In which this study found a significant beta coefficient of 0.395 ($p < 0.01$), whereas Innocenti et al. (2011) found a beta coefficient of 0.13 ($p < 0.01$). Both studies incorporated trust into the regression analysis. However, Innocenti et al. (2011) measured the the HRM system from the perspective of the HR departments of the participating organizations, while in this study the employees were self-reporting their perceived presence of HRM practices. Edgar and Geare (2005, p.544) argued that a study using an employee-perspective would be more likely to find
a significant relationship between the HRM system and employee attitudes, and that the found relationship would be stronger. These differences could also explain the difference between the results of various studies researching this relationship. Therefore, it becomes rather relevant to anchor one method in order to be able to compare these studies, because the source of the data is expected to moderate the found relationship between the HRM system and employee attitudes.

Other recent studies argued that the employee is not a passive receiver of HRM practices. Meijerink (2013) argued that employees always co-produce HRM practices since they are the ones that attend training, craft their jobs, and provide information during formal conversations such as job interviews. This implies an active role played by employees in HRM practices, instead of a passive role. The outcome of the HRM system is then affected by the co-production of employees (Meijerink, 2014). This idea originates from the field of marketing. Vargo and Lusch (2004) argued that provided services do not simply imply high value. Their ‘service logic’ argued that the consumers of services are co-producers, since their involvement in the service, in their pursue to fulfil their needs, determines the value of the service for the consumer. The value of services is depending on the consumption by the recipient of the service (e.g. Grönroos & Ojasalo, 2004). Furthermore, Gummesson (1998; 247) stated that; “value creation is only possible when a product or service is consumed”. Hence, as a service, the training can be offered to the employees. However, the value of this HRM practice depends on the consumption of the service by the recipients. Meijerink and Bos-Nehles (2016) conceptualized the concept of HRM consumption by employees and demonstrated its importance in the HRM research. Moreover, Meijerink, Bondarouk and Lepak (2016) argued that an employee’s capabilities (knowledge, skills and abilities) affected the variation in the perceived value of HRM services. In this light, the capabilities of employees while actively consuming HRM practices might be relevant in understanding the relationship between the HRM system and employee attitudes. This study indicated that an employee’s importance is not affecting the relationship much, whereas it has been found that the capabilities of employees do affect the influence of the HRM system. Therefore, it is advised that the field of research should shift their focus and ignore the ‘demand’ of the employees and continue to focus on what the employees have to ‘offer’ during their active interaction with or consumption of HRM practices. When we want to understand the relationship between the HRM system and employee attitudes it seems that we should focus less on employee’s needs, expectations or importance, but increasingly focus on the active interaction of employees with HRM practices and what capabilities they have to offer during the creation of HRM value. Research should then focus more on what human capital or competences are required to create HRM value through HRM practices. And how employees can utilise these competences to actively consume HRM practices.
5.2 Implications for Practice

HRM systems are designed to positively influence the individual employee attitudes, that in aggregate would result in an increased organizational performance (e.g. Nishii et al., 2008). Furthermore, positive employee attitudes are also associated with, for example, a decrease in turnover intentions and absenteeism (Yu & Egri, 2005). Hence, there is a great interest in understanding the variables related to employee attitudes. This study also argued that the HRM system is a rather important variable in explaining the variance within employee attitudes ($\beta = 0.395$, $p < 0.01$). This would suggest that an increase in HRM practices would lead to an increase in employee attitudes. However, multiple studies found divergent results regarding the relationship between the HRM system and employee attitudes. This study contributed by demonstrating that this relationship seems to be affected by the development- and growth-importance of an employee ($\beta = -0.166$, $p < 0.05$). Theories were presented to explain the found negative moderating effect.

Nevertheless, this study argued that an increase in HRM practices would not always lead to employee attitudes. Despite the fact that psychological contract importance was found to be a significant moderator, it did not seem to be an enormous moderator in the relationship between the HRM system and employee attitudes as only one dimension was found to moderate the relationship in a significant way. Because of the fact that this variable has little impact on the relationship, it is suggested that HR managers should not attempt to gather data on the psychological contract importance dimensions of their employees. Because assigning resources to this would not lead to increased insights or improved employees attitudes. HR managers should rather focus on providing HRM practices in combinations of interacting or complementary HRM practices. This study identified the HRM system as one unidimensional variable. Monks et al. (2013) and Lepak et al. (2006) already argued that configuration of the HRM system is rather important. For example, an organization could hire a student with high potential from a highly regarded university and use this employee to assemble parts at an assembly line or in the sanitary department of that organization. This might be an extreme example, but it seems rather apparent that the recruitment practice and job design practice should be adjusted to each other in this case. An HR manager could have annual job appraisals with their employees, but these appraisal would only lead to increased employee attitudes once other HRM practices are implemented to follow up the outcomes of that appraisal. In this light HR managers are suggested to invest in offering HRM practices as a function of multiple integrated HRM practices instead in order to raise employee attitudes. As this study indicated that the importance of employees do not impact the relationship between the HRM system and employee attitudes, I argued that there should be a shift of focus from the demand of employees regarding HRM practices to what they have to offer. Recent studies (e.g. Meijerink et al., 2016) argued that employee’s capabilities are affecting the outcome of HRM practices and caused variation in the
perceived HRM value. In this case it becomes evident to a HR manager to develop employee’s capabilities in order to ensure HRM value. Therefore, HR managers could focus on creating or developing capabilities among employees, or hire new employees with certain valuable competences. This emphasizes the need for an integrated and configured HRM system. Because it has no use to implement HRM practices without the presence of the necessary competences among the concerning employees.

Moreover, trust in management was also found to be an important predictor of employee attitudes ($\beta = 0.279, p < 0.01$). Therefore, it is suggested that HR managers should actively concern to keep this variable as high as possible. Certain leadership styles and management practices are found to be critical in constituting trust in management (Dirks & Ferrin, 2002). Dirks and Ferrin (2002, p.13) argued the following leadership styles and management practices were leading to increased trust; “ensuring fair procedures, outcomes and interactional processes; using participative decision making; providing organizational support; ensuring expectations are fulfilled; and using transformational and transactional leadership styles”. In which transformational leadership, perceived organizational support and interactional justice were found to have the strongest relationship with trust. Therefore it is suggested to HR managers to deploy resources to implement these leadership styles or management practices in order to assure a high level of trust among their employees.

5.3 Implications for Research

In order to compare studies with one another it becomes important to reach a consensus on how to measure the HRM system in general. I used the instruments of Meijerink and Bos-Nehles (2016) to measure the the HRM system as perceived by the employees. Other researchers tend to measure the the HRM system as implemented by the HR manager. Moreover, some researchers (e.g. Innocenti et al, 2011) used dichotomous variables in the form of absent or present HRM practices. Boselie et al. (2005) already argued that there is a lack of consensus in the field of research on which practices are present and how to measure them. As argued above, there is an increasing view that promotes the use of employees as the source of information to measure the implementation of HRM practices, since senior managers are often not in a position to give a fair estimation (Latorre et al., 2016). Edgar and Geare (2005) found that there is a difference between studies that use an employee-perspective to measure the HRM system compared to studies which used the HR department as a source of information. Edgar and Geare (2005) argued that studies using an employee-perspective would be more likely to find a significant relationship between the HRM system and employee attitudes, and that the found relationship would be stronger. Because of the differences in the way of measuring among studies researching the relationship between the HRM system and employee attitudes, it becomes hard to compare the results. An important implication for research is to be aware of the
fact that the source of information in measuring the HRM system does largely impact the found results. In this point of view the source of information is a major moderator in the relationship between the HRM system and employee attitudes as the studies using an employee-perspective are probably finding higher relationships between the HRM system and employee attitudes. Hence there is a need to constitute consensus on how to measure HRM systems before we are able to compare the studies. Due to the fact that research regarding employee attitudes are interesting in the employee’s affective reactions to the perceived HRM practices, it is suggested to continue to measure HRM systems as they are perceived by employees. According to the social exchange theory, only inducements as perceived by the employee are reciprocated with employee attitudes. Using employees as the source of information it can be measured how perceived HRM practices, and not thus intended or actual HRM practices, are leading to employee attitudes. Therefore it is suggested to continue research on this topic using employees as the source of information.

Moreover, the results suggested that solely the development- and growth-dimension of psychological contract important had a significant moderating effect on the relationship between the HRM system and employee attitudes ($\beta = -0.166, p < 0.05$). Hence this variable contributes in explaining the divergent results found in studies regarding this topic. However, the presented theories that could explain this negative moderation effect should be tested. Hence future research could be aimed at explaining this significant negative moderating effect. However, as the effect of this dimension of the psychological contract importance on the relationship between the HRM system and employee attitudes is not that strong, I argue that research should continue examining other factors that could have a stronger moderating effect on this relationship. The source of information, as argued above is probably a greater influencer in this relationship. This study did also confirm the important role of trust in management in this relationship. Therefore trust in management is a variable that should always be taken into account when researching the relationship between the HRM system and employee attitudes.

Whereas this study indicated that the importance of employees had little effect on the relationship between the HRM system and employee attitudes, recent papers introduced other possible moderators of this relationship. For example, Meijerink and Bos-Nehles (2016) demonstrated the impact of HRM consumption by employees. Moreover, Meijerink, Bondarouk and Lepak (2016) argued that an employee’s capabilities (knowledge, skills and abilities) affected the variation in the perceived value of HRM services. Hence, if we want to grasp a better understanding of the relationship between the HRM system and employee attitudes we should shift from ‘what employees want’ to ‘what employees have to offer’ concerning their active interaction with HRM practices. According to these recent papers, HRM value is affected by the active consumption of
employees, where they deploy their capabilities in order to create this HRM value. Future research should focus on examining which competences are needed for HRM practices to yield beneficial results, and how to develop these competences in order to establish a fruitful basis to implement HRM practices.

Furthermore, the factors analysis regarding the HRM system argued that the variable was unidimensional instead of three different systems based on the AMO-theory. Future research could aim to clear this phenomenon. Moreover, Wright and Kehoe (2007) argued that categorizing HRM practices is not fully suitable. They argued that HRM practices can yield different outcomes: “For instance, training programs primarily may aim at building the requisite skill base, but may also communicate a commitment to the employee that elicits motivation as well. Similarly, participation programs provide opportunity, but may also help build the knowledge and motivation of employees” (Wright & Kehoe, 2007, p.15). Hence, we might want to reflect on the call for the bundles-perspective. The study of Jiang et al. (2012) regarded the HRM system as three separate bundles and argued how these three bundles had a different effect on their organizational outcomes while studying on an organizational level. This might not be beneficial once studying individual outcomes on an individual level. Despite the recommendations of Jiang et al. (2012), the choice of method (i.e. bundles or unidimensional) might depend on the level of outcomes. Therefore an implication to research is that HRM practices should be considered as three bundles of HRM practices when examining organizational outcomes on an organizational level, whereas an unidimensional perspective is suggested when examining the effect of the HRM system on individual outcomes on an individual level. Nevertheless, this statement needs attention before adopting it into the field of research.

5.4 Limitations

On major limitation of this study is the generalizability of the sample. As I explained in the method section, I chose to research these concepts over multiple organisations instead of focussing on one. This has the advantage that the population becomes more comparable to the population, however I was not able to provide the data which was needed to assure that this convenience sample was indeed a good representation of the population. As the participants were originating from my own network, most of them were located in the eastern part of The Netherlands. Using a comparison between my sample and data from the CBS I attempted to demonstrate its generalizability over the Dutch labour market. However, as there was too little information on the sector distribution and firm sizes the comparison could not be executed properly. Based on the available data I argued that the sample is quite comparable to the population within the Dutch labour market. However, a more complete dataset would have granted a more valuable comparison. Therefore it is hard to argue that
the found results are generalizable over the population. Nevertheless the results of this study can still be regarded as indications which could be tested in a more extensive and more substantial study.

Moreover, the context the study can be seen as a limitation as well. The data of the survey was collected in one round, at one moment in time, using only one method, while the participants were self-administering the survey in anonymity. This cross-sectional study could be less suitable in order to determine a temporal relationship between the implementation of the HRM system and their outcomes. Because in this case the conclusions on the causal relationships between the variables within the data set are based on just one period in time. In this case a longitudinal study, for example, could grant us other or more valuable insights. Furthermore, self-reported studies have several disadvantages. Participants could exaggerate, be too embarrassed to reveal true answers and they are rather subjected to the time when the participant decides to fill out the form. When an employee had a quarrel with their supervisor or colleague at work, this will likely have influenced the data. However, controlling for every external factor is rather time-consuming and expensive. Therefore I conducted the research, but do also highlight this setting as a limitation of this study.

Another limitation of this study might be the impact of psychological contract importance of the employees whilst perceiving HRM practices as present or not present. Latorre et al. (2016) argued that employees are in a better position to argue the presence of HRM practices, however the perceptions of employees are probably not fully objective. 15 hours of training per year might be a lot to one employee, and too little to another employee. Hence once these employees are asked about the presence of certain HRM practices such as training, the answers would probably not be the same. In this case the importance could have affected the perceptions of employees. This was not tested in this study, but could have impacted the data set.

As argued above, there is no consensus on how to measure HRM systems. In this study I carefully choose the instruments in order to measure the variables within this study. However, these instruments have their pros and cons (see method section). Mainly the newly created instrument to measure psychological contract importance is rather perilous. Despite the fact that the factor analysis improved the instrument, its novelty should still be taken into account. Possibly another study can find a significant moderating effect of importance using a different method or instrument. Hence this variable should be validated and tested in order to incorporate this variable into the field of research.

6. Conclusion
This study aimed to explain the differences found in the relationship between the HRM system and employee attitudes. Using the social exchange theory, I theorized that psychological contract
importance could be an important moderating variables in this relationship which could be used to (partially) explain the found variance. The results of the multiple regression analysis did provide support for this theory. However, this was only the case with one dimension of psychological contract importance. This study examined the extent to which psychological contract importance would influence the relationship between the HRM system and employee attitudes. The answer is; a little to none. Other suggested variables probably have a far stronger influence on the relationship between the HRM system and employee attitudes. In doing so a shift is suggested from the demand-side of employees regarding HRM practices to the offer-side. Importance is not found to be a major influencer on the relationship, whereas recent studies indicated that what the employees have to offer does matter. Future research should therefore focus on this side of the bargain. In doing so, trust in management and the source of information should be taken into account.

Moreover, as the factor analysis argued that the HRM system should be considered as a unidimensional variable it should make us reconsider the use of bundles in order to measure HRM practices. Despite the fact that, for example, Jiang et al. (2012) argued that HRM practices should be considered as three different bundles of HRM practices, this study questions their recommendation. Compared to Jiang et al. (2012), an explanation might lay in the level of analysis or level of outcomes. Future research should therefore not blindly separate their HRM practices into bundles, but should continue to argue why and when the HRM system should be considered as an unidimensional variable or as a variable consisting of three dimensions.

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8. References


7. Appendix

7.1 All used items, as listed per variable

As explained above, this questionnaire was distributed to employees in the Netherlands. Therefore the Dutch language was used.

7.1.1 Human Resource Management System

Items of Meijerink & Bos-Nehles 2016 were used to measure HRM practices. Employees were asked to respond on five-point Likert scales ranging from “1 = strongly disagree” to “5 = strongly agree”.

Ability-enhancing practices:
Selectie
‘De selectie van nieuw personeel…’
‘…is uitgebreid/uitvoerig’
‘…legt de nadruk op het talent om samen te werken in een team’
‘…houdt in dat veel sollicitanten gescreend worden’
‘…richt zich op het selecteren van de beste all-round sollicitant’
‘…legt de nadruk op de bevordering van huidige medewerkers (interne promotie)’
‘…geeft prioriteit aan het leervermogen van de sollicitant’

Training
‘De training die ik bij mijn werkgever heb doorlopen, hebben mij goed voorbereid om kwaliteit te leveren’
‘Mijn werkgever biedt mij voldoende opleiding om goed met de introductie van nieuwe producten of diensten om te kunnen gaan’
‘Ik neem normaal gesproken de paar jaar deel aan een training programma om mijn vaardigheden te verbeteren’
‘Mijn werkgever ondersteunt mij om trainingen bij te wonen’
‘Ik heb inspraak in hoeveel scholing ik krijg’
‘Als ik in mijn eigen tijd extra scholing volg, dan betaalt mijn werkgever dit’

Motivation-enhancing practices:
Beoordeling
‘Mijn beoordeling is gebaseerd op objectieve en meetbare resultaten’
‘Mijn leidinggevende stelt samen met mij presentatieafdoelstellingen op waarop ik wordt beoordeeld’
‘Ik krijg feedback om mijn werkpatrijzen te verbeteren’

Beloning
‘Een deel van mijn salaris/beloning is gebaseerd op hoe goed ik mijn werk doe’
‘Mijn salaris is volledig gebaseerd op hoe lang ik in dienst ben bij mijn werkgever’
‘Een deel van mijn salaris/beloning is gebaseerd op hoe mijn werkgever financieel gezien presteert’
‘Mijn salaris is hoger dan wat de concurrenten van mijn werkgever bieden’
‘Een deel van mijn salaris/beloning is gebaseerd op de totale bedrijfsspansting van mijn werkgever’
‘Ik geloof dat ik eerlijker betaald zou krijgen als ik bij een andere organisatie werkte (R)’
‘Mijn salaris hangt af van de kwaliteit van producten/diensten die ik lever’
‘De hoogte van mijn salaris hangt af van mijn werkpatrijzen’

Opportunity-enhancing practices:
Taakontwerp
‘Mijn werk is simpel en behoorlijk herhalend (R)’
‘Ik heb veel kansen om zelf te bepalen hoe ik mijn werk doe’
‘Als er een probleem ontstaat in mijn werk, dan kan ik er zelf voor zorgen dat het wordt opgelost’
‘Ik heb weinig kansen om in mijn werk mijn eigen inzichten te gebruiken (R)’
‘Ik voel me vaak verveeld op het werk (R)’
Participatie
‘Ik heb het gevoel dat ik echt onderdeel ben van mijn team’
‘Als er een beslissing genomen moet worden, dan is iedereen daarbij betrokken’
‘Als ik op het werk ben, heb ik het gevoel controle te hebben over zaken die om mij heen gebeuren’
‘Mijn leidinggevende vraagt mijn mening over hoe de kwaliteit van onze producten/diensten verbeterd kan worden’
‘Mijn ideeën over hoe de kwaliteit van producten/diensten verbeterd kan worden, worden normaal gesproken volledig of gedeeltelijk uitgevoerd binnen het bedrijf’

7.1.2 Employee attitudes
(5-point Likert scale; 1 = strongly disagree, 5 = strongly agree)

Job satisfaction
‘Al met al, ben ik tevreden met mijn baan’
‘Over het algemeen vind ik het leuk om hier te werken’
‘Alles overwegende, ben ik tevreden met mijn huidige baan’

Affective commitment
‘Ik zou heel blij zijn als ik de rest van mijn loopbaan bij deze organisatie kan doorbrengen’
‘Ik geniet ervan om over mijn organisatie te praten met mensen die er niet werken’
‘Ik voel echt dat de problemen van deze organisatie ook de mijne zijn’
‘Ik denk dat ik gemakkelijk gehecht kan raken aan een andere organisatie, zoals ik nu aan deze organisatie gehecht ben (R)’
‘Ik voel me niet als een ‘deel van de familie’ bij deze organisatie (R)’
‘Ik voel me niet ‘emotioneel gehecht’ aan deze organisatie (R)’
‘Deze organisatie heeft veel persoonlijke betekenis voor mij’
‘Ik voel me niet thuis bij deze organisatie (R)’

7.1.3 Psychological Contract Importance
(5-point Likert scale; 1 = not important at all, 5 = extremely important)

Ability-importance
‘Loopbaan training’
‘Mogelijkheden voor persoonlijke groei’
‘Mogelijkheden om nieuwe vaardigheden te ontwikkelen’
‘Voortdurende professionele training’

Motivation-importance
‘Erkenning voor mijn prestaties’
‘Mogelijkheden voor promotie en vooruitgang’
‘Prestatie-gebonden salaris en bonussen’
‘Competitief salaris’

Opportunity-importance
‘Participatie in de besluitvorming’
‘Vrijheid om creatief te zijn’
‘Een baan die autonomie en controle biedt’
‘Voldoende middelen om het werk uit te voeren’
‘Adequate uitrusting/middelen om het werk uit te voeren’

7.1.4 Control Variables
(5-point Likert scale; 1 = not important at all, 5 = extremely important)
Trust in management
‘Mijn manager / werkgever…’
‘…kun je op vertrouwen dat hij zijn beloften nakomt’
‘…probeert oprecht het standpunt van zijn werknemers te begrijpen’
‘…gaat eerlijk om met zijn werknemers’
‘…behandelt zijn werknemers gelijkwaardig’

Contract Type
‘Hoe veel uur werkt u per week bij uw werkgever?’

7.2 Introduction to the questionnaire
As this mail was distributed to employees within my own network, the Dutch language was used.
“Vragenlijst over HRM door medewerkers

Allereerst bedankt voor uw bereidheid om deel te nemen aan dit onderzoek. Voor mij is dit essentieel om te kunnen afstuderen, en hopelijk ervaart u het als een kleine moeite. Het invullen van deze vragenlijst kost u ongeveer 10 à 15 minuten. Als beloning voor uw moeite maakt u kans op één van de vijf waardebonnen van bol.com (tien euro per stuk). Uw antwoorden komen direct bij mij terecht, en zullen dus niet gelezen worden door uw werkgever. Verder gaat het mij niet om u, maar om uw antwoorden. Desalniettemin ga ik vertrouwelijk om met de antwoorden en zullen de onderzoeksresultaten volstrekt anoniem zijn.

Waar gaat het onderzoek over?
Deze vragenlijst gaat over het effect van ‘human resource management’ (HRM) praktijken. Bij HRM kunt u denken aan het aanneemen, ontwikkelen, motiveren en beoordelen van medewerkers. Van u wil ik graag weten welke HRM praktijken u ervaart binnen de organisatie, wat u belangrijk vindt dat u geboden wordt, en hoe uw relatie is tot uw werkgever en uw organisatie. Ik wil u er graag aan herinneren dat uw werkgever de antwoorden niet te zien krijgt, en het volledig anoniem blijft. Daarnaast kunnen uw antwoorden niet ‘goed’ of ‘fout’ zijn omdat het mij gaat om uw ervaringen.

Vragen?
Mocht u nog vragen hebben over dit onderzoek, of wilt u graag de conclusie van het onderzoek lezen; stuur dan gerust een mail naar t.h.w.bos@student.utwente.nl.

Alvast bedankt!

Thomas Bos’