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# **The Mediating Effects of Individual Proactive Behaviour in the Relationship between Organizational Justice and Workplace Performance in Family Businesses**

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## **Abstract**

This study examines the role of organizational justice for proactive behaviours and subsequently, workplace performance of nonfamily employees in family firms in a two-level research. On the one hand, this study hypothesized organizational justice had a positive relationship with proactive behaviours at the individual level. On the other hand, this study hypothesized that shared proactive behaviour – the organizational level construct of individual proactive behaviours – mediate the relationship between justice climate – the organizational level construct of organizational justice – and workplace performance. These relationships were tested in a cross-sectional study consisting of 617 family and nonfamily employees working in 122 family firms. The results showed that shared levels of proactive behaviour did not mediate the relationship between justice climate and workplace performance. Nonetheless, organizational justice was found to be significant predictor of workplace performance and of proactive behaviour – on both the individual and the organizational level. Equally important and contrary to the previous literature, this study revealed that the differences between nonfamily and family employees in family firms with regard to the proposed relationships were not significant. Furthermore, despite an insignificant mediation, the results suggested a suppression effect of shared proactive behaviour on the relationship between justice climate and workplace performance. Additional analysis on the total sample confirmed such third variable effect. All in all, this study contributes to our understanding of the role of fairness for the behaviour of nonfamily employees in family firms.

*Keywords:* family firms, nonfamily employees, organizational justice, individual proactive behaviour, justice climates, shared proactive behaviour, workplace performance, self-determination theory, social contagion theory

## **Introduction**

In recent years, family firms have grown into a major source of research due to its high prevalence, critical importance to its economies and its diverging nature (Verbeke & Kano, 2012; Nippa, 2015). Family firms can generally be identified by a degree of family ownership and/or management (Barnett & Kellermans, 2006; Lee, 2006). According to a statistic from the Family Firm Institute, family firms generate about 80% of the annual GDP and collectively account for more than two thirds of all firms around the world (De Massis, Frattini, Majocchi & Piscitello, 2018). In the context of family firms, approximately 80% of the workforce is composed of nonfamily employees and are therefore highly important for the organizational performance, and ultimately for the survival of family firms (Tabor, Chrisman, Madison & Vardaman, 2018). However, ensuring commitment and more importantly, an adequate level of workplace performance from nonfamily employees in family firms has often proven to be a challenge (Nippa, 2015; Tabor et al., 2018). Performance in the context of family firms generally takes into consideration the family and business dimensions, referring to relationships between family members and the available financial capital respectively (Sharma, 2004). In other words, the performance of the firm is not only crucial for the survival of the firm but it can also directly impact the family's welfare, meaning that performance is generally of high priority to family firms (Gibb Dyer Jr, 2006; Lee, 2006; Carmon, Miller, Raile & Roers, 2010). It is for this reason that ensuring an adequate level of workplace performance - in particular coming from nonfamily employees - is especially relevant in the context of family firms.

Research has shown that organizational justice leads to organizations to be perceived as fair and to have higher workplace performance (Masterson, Suzanne, Lewis, Goldman & Taylor, 2000; Aryee, Budhwar & Chen, 2002; Li & Cropanzano, 2009; DeConick, 2010; Moon, 2012). Organizational justice refers to the impact of fair treatment on the functioning of an organization (Colquitt, 2001). However, nonfamily employees can be said to commonly experience unfair treatment and subsequently, a tougher integration, due to a lack of specific knowledge to the family firms and high degrees of family involvement and control (Barnett & Kellermans, 2006; Verbeke & Kano, 2012). This perception of injustice or unfair treatment among nonfamily employees can further be reinforced through justice climates. Justice climates are group-level perceptions of justice as a result of interactions (Naumann & Bennett, 2000). Although numerous research has

focused on the individual-level of organizational justice, in recent years, organizational justice has gained a widespread recognition as an organization- or group-level construct (Li & Cropanzano, 2009; Moon, 2017). Such group dynamics can have the capacity of persisting negative perceptions coming in case a network of individuals is affected (Barsade, 2002). On the other hand, the proportion of family firms that succeed in encouraging proactive behaviours among its nonfamily workforce may better succeed in workplace performance, and can directly result from fair treatment on the workforce (Fritz & Sonnetag, 2009; Kim & Park, 2017). Individual proactive behaviour refers to the act of taking initiative, bringing about change, and generally creating and controlling a situation by doing so (Bindl & Parker, 2010; Crant, 2000; OED, 2019). Although this type of behaviour can have positive impacts on workplace performance, it can also come in different forms with unintended consequences (Belschak & Hartog, 2010). Also this concept can be found to interact on a group-level (Druskat & Kayes, 2000). Nevertheless, the proportion of nonfamily employees - and subsequently the degree of organizational justice and proactive behaviours - differs for each family firms (Barnett & Kellermans, 2006). Therefore, the variation within family firms with regard to the proposed relationship – potentially stemming from the proportion of nonfamily employees – will be the focus of this thesis.

Specifically, the effect of organizational justice on individual proactive behavior on the individual-level, and the corresponding mediating effect of organizational justice, through proactive behavior, on workplace performance on the organization-level will be the topic of this thesis. This aim of this thesis is to contribute to the literature on proactive behaviour, which has been scarce in relation to organizational justice. In particular, the relation with justice climates and the organization-level approach towards proactive behaviours lacks research, and will be of high academic value since many scholars have turned their attention from an individual approach toward organizational justice to a shared perception of justice at the organizational level (Moon, 2017). Tapping into this theoretical gap will hopefully also serve family firms in considering the potential effects of organizational justice and proactive behaviour for its workplace performance. Through a quantitative research, the following research question will be answered: *To what extent does justice as perceived by non-family employees relate to workplace performance in family firms, and to what extent is this relation mediated by shared proactive behaviour?*

## **Theoretical Framework**

### ***Organizational Justice in Family firms***

Although there has often been disagreements about its definition, family firms can generally be defined as follows (Barnett & Kellermans, 2006): “A business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families” (p. 839). Research has shown that in particular two factors are critically distinctive for family firms, in comparison to nonfamily firms (Barnett & Kellermans, 2006). First one being the idiosyncratic knowledge resulting from interactions among the family and its firm, and the second being the degree of family involvement and influence (Barnett & Kellermans, 2006; Verbeke & Kano, 2012). In addition, prior research has also demonstrated that family members often receive preferential treatment as opposed to nonfamily employees (Tabor et al., 2018; Verbeke & Kano, 2012). That is because nonfamily employees often lack this previously mentioned idiosyncratic knowledge specific to family members, which results in nonfamily members having to face higher entry barriers and consequently a tougher integration (Verbeke & Kano, 2012; Tabor et al., 2018). Thus, despite the efforts a nonfamily employee may do for the family business, due to the lack of knowledge and skills specific to family firms they can be treated unfairly. In view of this apparent low degree of fairness within family firms - largely in favour of family employees - one could say that there tends to be issues related to organizational justice. Organizational justice is commonly concerned with the fair treatment of employees and whether this treatment influences effective organizational functioning (Colquitt, 2001; Moorman, 1991). After years of research, complicating debates and disagreements over the dimensionality of organizational justice, researchers have generally agreed on four distinct facets of organizational justice; distributive justice, procedural justice, informational justice and interactional justice (Colquitt, 2001; Colquitt, Greenberg & Zapata-Phelan, 2005). That is to say that reaching a perfect sense of organizational justice can prove to be a challenge due to its many facets developed over time.

Previous research has shown that several theories have historically accounted for the explanation of issues related to organizational justice (Greenberg, 1987; Greenberg, 1990). For instance, the equity theory has long served as the basis by asserting that employees experiencing

injustice will respond in undesirable behavioural or psychological manners (Greenberg, 1990). Other theories such as the relative deprivation theory or the reactive theory of justice have also proven their mere value over time, but all these theories quickly experienced limited success for explaining issues related to organizational justice (Greenberg, 1987; Greenberg, 1990). However, more recent research has claimed that organizational justice is better explained by the social exchange theory, which involves two important related facets; trust and fairness (DeConinck, 2010). According to DeConinck (2010), establishing exchange relations implies making investments in one another, which will lead to having trust in one another that future decisions and interactions will be fair and as a result that there is a sense of justice between the two parties. As a result, both parties will feel an obligation to repay, which is said to result in employee performance in the organizational context (DeConinck, 2010). This stream of thought is in line with other research that suggests that perceptions of justice reinforce the benefits of social exchange relations on work-related attitudes and behaviours (Masterson, Suzanne, Lewis, Goldman & Taylor, 2000; Aryee, Budhwar & Chen, 2002; Moon, 2012). Nevertheless, an effective exchange relationship requires a notion of trust between both parties, which can be challenging due to risks of uncertainty and vulnerability of either party (Aryee et al., 2002). Previous research has also shown that, prior to achieving trust, trustworthiness of involved actors plays a crucial role (Frazier, Johnson, Gavin, Gooty & Bradley Snow, 2010). Furthermore, the family involvement and influence that nonfamily employees experience may further impact their perceptions of justice, leading to higher constraints in establishing an exchange relationship (Barnett & Kellermans, 2006; Frazier et al., 2010). Nevertheless, the family involvement and influence may vary and in fact, prior research has shown that a sense of organizational justice among its nonfamily workforce can be achieved by being factual, consistent, and altruistic among other endeavours (Van der Heyden et al., 2005; Barnett & Kellermans, 2006; Tabor et al., 2018). Under those circumstances, nonfamily employees will feel the need to reciprocate the efforts made by the family firm, resulting in a change in work behaviour. Here, we focus on proactive behaviour.

### ***Organizational Justice and Individual Proactive Behaviour***

Central in this section is the relationship between organizational justice and individual proactive behaviour. Individual proactive behaviour can be defined as “taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively

adapting to present conditions” (Crant, 2000, p. 436). Bindl & Parker (2010) defined individual proactive behaviour as “self-directed and future-focused action in an organization, in which the individual aims to bring about change, including change to the situation and/or change within oneself” (Bindl & Parker, 2010, p. 568). More generally, the Oxford English Dictionary (2019) defines being proactive as “creating or controlling a situation by taking the initiative and anticipating events or problems, rather than just reacting to them after they have occurred; (hence, more generally) innovative, tending to make things happen”. Due to the overlap among all provided definitions, this study will adopt the concept of individual proactive behaviour according to the provided definitions. In addition, individual proactive behaviour is found to be related to organizational citizenship behaviour, since both concepts are considered discretionary employee behaviour (Belschak & Den Hartog, 2010). Yet, based on the definition, individuals engaging in proactive behaviours define their roles as being more broadly, encapsulating new tasks and goals, by simply challenging the status quo or bringing about change (Crant, 2000; Bindl & Parker, 2010). Therefore, all types of roles - extra-role as well as in-role - can be carried out proactively (Parker & Collins, 2010).

Individual proactive behaviour has been argued to require specific motivations and is for that reason historically accounted for by motivational theories (Ohly & Fritz, 2007). Additionally, Crant (2000) recommends that the pursuit of goals are of crucial importance for explaining the motivations for engaging in proactive behaviour. Following this rationale, Parker, Bindl & Strauss (2010) drew on the self-determination theory for the explanation of proactive behaviour. According to Parker et al. (2010), the self-determination theory states that individual proactive behaviours are essentially self-initiated and that externally-regulated motivation is therefore, irrelevant. Conversely, the self-determination theory posits that individuals are motivated - both intrinsically and extrinsically - once the needs for competence, relatedness and autonomy are satisfied (Ryan & Deci, 2000). Nevertheless, Parker et al. (2010) state that even when these needs are not met, a process of internalization or integration - as proposed by the self-determination theory - will consider these tasks as fulfilling important life goals. Thus, in either scenario, individuals will strive for proactive goals. Correspondingly, Fritz & Sonnetag (2009) suggest that the broaden-and-build model can reinforce this phenomenon. The model states that as long as an individual has a positive outlook on the job, it will broaden the individual’s physical, intellectual

and social resources, which may even undermine possible negative effects and thus, leading to proactive behaviour.

Following this rationale, the relationship between organizational justice and individual proactive behaviour can be explained by the self-determination theory. Even though self-determination theory emphasizes the distinction between intrinsic and extrinsic - or autonomous and controlled - motivation, proactive behaviour is autonomous by definition (Parker et al., 2010; Ryan & Deci, 2000). Based on the premise of this theory, organizational justice will provide individuals with the necessary resources for engaging in individual proactive behaviours (Aree, Walumbwa, Mondejar & Chu, 2015). More specifically, organizational justice will facilitate the process of satisfying the needs for competence, relatedness and autonomy, required to engage in proactive behaviour. Although this reasoning may indicate the importance of organizational justice for proactive behaviour, the empirical evidence on this particular relationship is scarce. For instance, Kim & Park (2017) found evidence for the relationship between procedural justice and knowledge sharing and innovative work behaviour - two concepts closely related to proactive behaviour. Likewise, Crawshaw, Van Dick & Brodbeck (2012) found similar evidence for the relationship between procedural justice and individual proactive behaviour, though under the condition of an unfavourable perception of career development opportunities. Furthermore, based on the association between positive outlooks - or moods - and proactive behaviours as described above, Fritz & Sonnetag (2009) argue that organizations should treat its employees fairly. This lack of proactive behaviour in family firms is also confirmed by some researchers, which generally state that nonfamily employees lack a voice in family firms - as a direct result of unfair treatment - which naturally undermines their individual proactive behaviour (Barnett & Kellermanns, 2006; Van der Heyden, Blondel, & Carlock, 2005). Based upon all the above, the following hypothesis will be tested:

H1: Higher levels of individual perceptions of organizational justice are positively related to higher levels of individual proactive behaviour

### ***Organization-Level Perspective: Justice Climate & Shared Proactive Behaviour***

The focus of this section is the relationship between organizational justice and proactive behaviours at the organization-level. Although the vast majority of research has focused on



individual proactive behaviour, some researchers have examined the proactive behaviours at the organization-level - or rather at the group-level - but as a collective effect on the organization (Druskat & Kayes, 2000; Kirkman & Rosen, 1999). Moreover, due to this lack of research there is also no clear-cut definition of this organization-level behaviour. According to Kirkman & Rosen (1999), proactive behaviours at the group-level consists of collective efforts in revising work processes, seeking innovative solution and continuous improvements. With regard to organizational justice at the organization-level, commonly referred to as justice climate, can be defined as “the group-level cognition about how a work group as whole is treated” (Naumann & Bennet, 2000, p. 882). As the definition may indicate, justice climate is characterized by similar interpretations of justice within an organization as a result of interaction among employees - or within groups for that matter - meaning that justice climates consists of individual as well as group based perceptions (Naumann & Bennet, 2000).

Justice climates have generally been explained by two theories: the social information processing theory and the attraction-selection-attrition model (Li & Cropanzano, 2009; Moon, 2017). The former theory asserts that behaviours and work attitudes are directly shaped on the basis of information from the social environment and thus, directly resulting from group processes within organizations (Salancik & Pfeffer, 1978; Li & Cropanzano, 2009). On the other hand, the attraction-selection-attrition model, posits that employees are attracted towards an organization if they share similar characteristics, which encourages the organization to select these particular employees, and in case employees do not fit this description they tend to leave (Schneider, 1987; Li & Cropanzano, 2009). As both these theories demonstrate, justice climates are constituted on the basis of how a group of individuals or an organization are treated and thus, how cognition and ideas are shared among individuals. Notwithstanding the importance of sharing cognition and ideas, research has shown that the sharing of emotions is also crucial for capturing the essence of justice climates (Barsade, 2002). A research stream that also captures the sharing of emotion - resulting in a development of group emotion - is social contagion theory (Barsade, 2002; DeGoey, 2000; Roberson & Colquitt, 2005). DeGoey (2000) argues that the thought and feelings regarding justice spread among individuals, within their respective networks. Thus, individuals within their networks form perceptions of justice collectively - through ‘contagious’ thoughts and feelings - which subsequently impacts the functioning of a workforce.

Given the above points, the relationship between justice climates and proactive behaviour

at the organization-level can be explained by the social contagion theory. In cases where employees discuss their justice perceptions with other colleagues it may construe a justice climate. In turn, this signifies that individual employees share their thoughts and feelings regarding the degree of fair treatment - a process of social contagion - which is said to enhance interdependence among employees (Barsade, 2002; DeGoey, 2000). Consequently, it will result in an increase of ties and centrality of individuals within respective network, as posited by the theory (DeGoey, 2000; Roberson & Colquitt, 2005). Following the rationale of this theory, the development of shared interpretations will serve as the basis of how groups of employees - or networks - will cope and react to organizational issues, therefore, showing shared proactive behaviour.

Correspondingly, a similar pattern takes place among nonfamily employees in family firms. In fact, previous research has recognized the occurrence of sub-groups inside family firms, consisting of employees with similar functions, backgrounds or degree of involvement among other factors (Van der Heyden et al., 2005). Each sub-group – solely with nonfamily employees for that matter – are said to have different perceptions of entitlement and therefore, distinct levels of justice perceptions (Van der Heyden et al., 2005). Thus, given the abovementioned rationale of the social contagion theory and the apparent existence of collectively discussed justice perception within sub-groups in family firms – in other words, justice climates – one could say that nonfamily employees may display shared proactive behaviour.

Although previous research on the direct relationship between justice climates and shared proactive behaviour are lacking, other previous research supports the given assumption. For instance, Li, Liang and Crant (2010) have found evidence for the positive effects of justice climates on proactive behaviours, based on the reciprocity assumption as posited by the social exchange theory. Likewise, empirical research by Raub & Liao (2012) has shown that initiative climate - a construct related to justice climate - contributes to the degree that employees showed proactive behaviours. Concluding, justice climates can lead to shared proactive behaviour, through feelings of interdependence and shared perceptions expressed in network. Hence, the following hypothesis:

H2: Higher levels of justice climate are positively associated with higher levels of shared proactive behaviour at the organization-level

***Organization-level: Shared Proactive Behaviour & Workplace performance***

Central in this section is the relationship between shared proactive behaviour and workplace performance at the organization-level. Workplace performance in this study, is identified as the outcomes of employment relations, employee contributions and the commitment and flexibility of employees (Guest & Peccei, 2001). In the context of family firms, the immense desire to preserve family values and control can regularly result in a - so called - bifurcation bias, which can be used for explaining workplace performance in family firms. Family firms subject to this bias may not enjoy the full potential of the nonfamily workforce (Verbeke & Kano, 2012). That is because this bias implies that family employees in family firms are always assumed as more desirable due to their idiosyncratic knowledge, loyalty, long-term contribution etc. regardless of their actual work capacity (Verbeke & Kano, 2012). Therefore, proactive behaviours should be seen as a great potential asset for family firms in the pursuit of workplace performance,

The relationship between shared proactive behaviour and workplace performance can be explained by the self-determination theory. As described earlier, this theory asserts that proactive behaviour is essentially self-initiated and are shown when the needs for competence, relatedness and autonomy are satisfied (Parker et al., 2010; Ryan & Deci, 2010). Nevertheless, proactive behaviours are not always in favour of organizations; they can be both positive and negative (Belschak & Hartog, 2010). In fact, the social embeddedness of individuals within organizations and as a result, the impact on their individual career, play a crucial role in showing either forms (Belschak & Hartog, 2010; Ryan & Deci, 2000). Thus, contexts supportive of autonomy, competence and relatedness will foster greater relations between proactive behaviours and workplace performance (Ryan & Deci, 2000).

Nonetheless, previous research has shown that the relationship between proactive behaviours and employee performance is generally of positive nature. For instance, the study by Crant (1995) showed that proactivity leads to higher performance, though measured in the field of real estate agents. Likewise, Van Dyne & LePine (1998) found that employees that voiced out concerns - related to proactive behaviour - received higher ratings in performance. Similarly, Grant, Parker & Collins (2009) found that proactive behaviours were indeed significant predictors of performance evaluations. Additionally, Druskat & Kayes (2000) even found that specifically shared proactive behaviour also had the capacity to enhance performance through the improvement of efficiency and quality. Nevertheless, due to the general presence of family involvement, control

and the so-called bifurcation bias, the relation between shared proactive behaviour – of nonfamily employees in family firms - and workplace performance may be reduced. Nonetheless, given the rationale of the theoretical and empirical evidence, and the information provided earlier, the following hypotheses will be tested:

H3: Higher levels of shared proactive behaviour are positively associated with workplace performance at the organization-level

H4: The relationship between justice climate and workplace performance is mediated by shared proactive behaviour at the organization-level

The hypotheses of this study are displayed in the overall conceptual model (Figure 1).

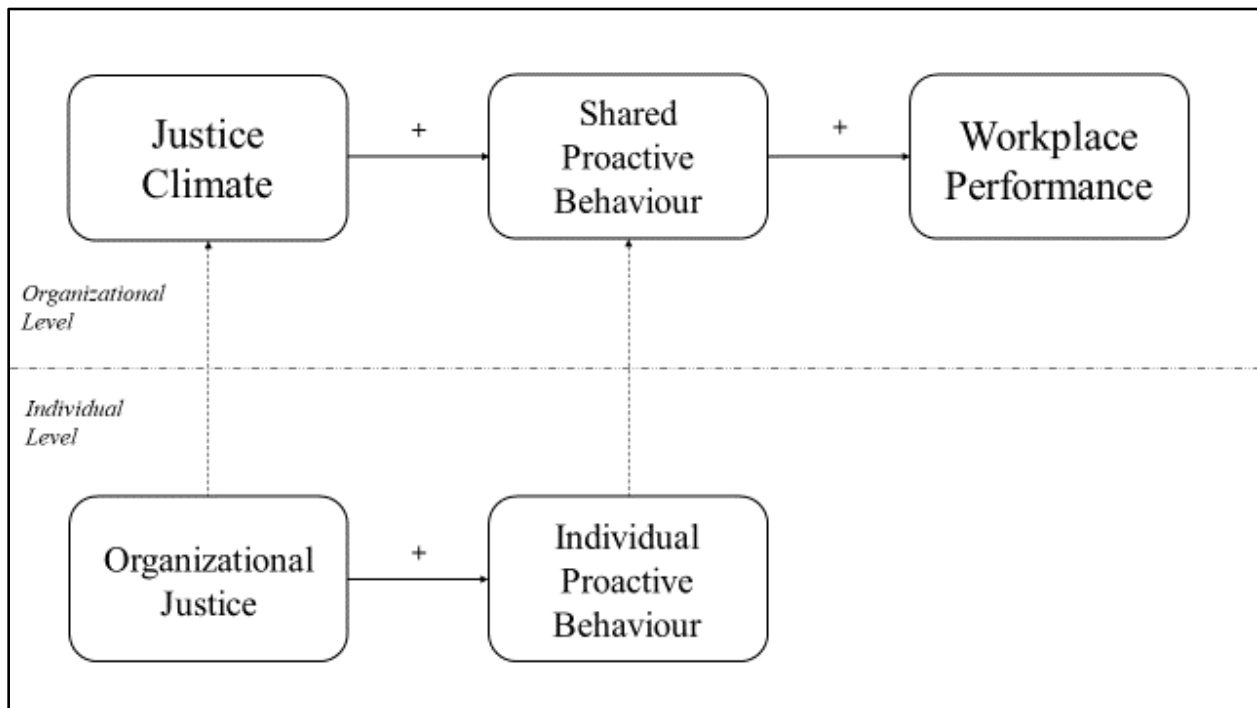


Figure 1. Conceptual Model

## **Methods**

### ***Research Design***

A quantitative cross-sectional design is used to examine the extent to which organizational justice explains the workplace performance of nonfamily employees within family firms in the Netherlands, and whether individual proactive behaviour influences this relationship. Additionally, this relationship is examined at the organization-level where the scores of individual level organizational justice and proactive behaviour are respectively aggregated to the organization level. This information is collected through questionnaires, more specifically, through two distinct questionnaires for owners and employees of each researched family firm – questions pertaining to respectively the organization-level and the individual-level. These questionnaires are part of larger project in which students collaborated in collecting data. The firms in this particular study have been retrieved through a sampling technique referred to as convenience sampling. This particular type of nonprobability or nonrandom sampling entails that the researcher included participants to the target population that met the previously mentioned criteria (Etikan, Musa & Alkassim, 2016). However, specific instructions both for the type of firms and for the employee selection within these organizations were required for this specific research. Furthermore, the firms within in this sample had to meet the requirements of having minimum of 10 and a maximum of 500 employees. Additionally, the intended number of respondents that were required was an average of 30% response rate for each approached organization.

### ***Sample***

Once the data collection had been terminated, a final dataset had been created for the analysis. The initial dataset consisted of 205 organizations and 1532 employees. However, given that this research focused on the effect of organizational justice as perceived by nonfamily employees in family firms on workplace performance – through the proactive behaviours of this specific group of employees – respondents or firms not conforming to these criteria were removed. With regards to family firms, the criteria for family firms as outlined by previous research was adopted; some degree of family ownership and/or management with the aim to sustain the family vision (Barnett & Kellermans, 2006; Lee, 2006). More specifically and in line with the oft-cited definition by the European Commission, family firms were found to be eligible on the basis of having a majority of

the decision-making rights in the possession of the family (European Commission, 2009). Family firms were identified on the basis of the following item in the owner questionnaire: “Which percentage of the shares / ownership are in the hand of a family?”. This item could be answered by: (1) None, (2) 50% or more of the shares + members in management, (2) 25% or more of the shares + members in management. All firms having at least 25% of the shares owned by a family and having members in the management board were considered family firms. This resulted in 141 family firms and 1000 employees from the total sample of 205 organizations and 1532 employees respectively.

With regards to the employees within these family firms, both the family and nonfamily employees were retained in order to investigate the role of nonfamily employees in comparison to family employees in the proposed relationship throughout this paper. These two types of employees were distinguished on the basis of the following question in the employee questionnaire: “Do you work for a family firm? This implies that a considerable amount of the firm is owned by one family”. This item could be answered by: (1) Yes, I am a family member, (2) Yes, I am not a family member, (3) No, (4) Do not know. Only respondents answering either “(1) Yes, I am a family member” or “(2) Yes, I am not a family member” were retained. This resulted in an adjusted total of 122 family firms and 617 employees.

The characteristics of the sample included in this research were as follows. The employee sample had the following characteristics: Gender revealed that there were more men (59.6%) than women (40.4%). Education revealed that the highest completed education of most respondents was that of intermediate professional education (32.6%), with higher education coming far behind as second (22.1%). Additionally, Family – the dummy variable created for the distinction between family and nonfamily employees – revealed that there were more nonfamily employees (73.3%) than family employees (26.7%). Furthermore, the average age was found to be 40 years (SD=13.21), the average years employees were employed at a firm was 9 years (SD=9.28). The organizational sample had the following characteristics: the sample consisted of more manufacturing firms (57.8%) than service firms (40.0), the remaining percentage was not filled in by several owners. The average organizational size - measured by amount of employees - was around 26 (SD=23.73) Additionally, Family had a mean of .30 (SD=.38), meaning that on average 30% of the respondents per organization were family members.

### ***Procedure***

Employees in family firms have been researched in this particular study. Family employees are related to the owning family by blood ties. A nonfamily employee was considered to belong to this particular group when they did not consider themselves as part of the family owning or managing the family firm. Family firms were initially contacted through an information letter and a data collection agreement form. The procedure of the data collection was further elaborated and resulted in either an agreement or disagreement to participate in the study, and whether they had participated before. For each consenting family firm, questionnaires for both employees and owners had to be handed over along with an information letter and forms ensuring anonymity and confidentiality. In addition to an online version, a hardcopy version was also made available. Once completed, questionnaires had to be personally retrieved and subsequently added to the existing database - for a maximum of 10 years - alongside a specific code for each family firm to ensure the nested structure of the data. Thus, each student with the same topic of “(Strategic) HRM and employee perceptions of work practices and fairness in small (family) business)” had to adhere to the specific data collection rules as introduced at start.

### ***Measures***

All of the variables of concern were measured using the existing questionnaire, which is based on existing measures. A factor analysis was conducted for all variables in order to ensure for the expected amount of dimensions and whether it would exceed the expected amount of dimensions. Respectively, the scree plot and the Eigenvalue have been investigated for the investigation of the amount of dimensions. Dimensions - or factors - appearing before the point where the slope of the scree plot levels off were selected. Next, Cronbach's Alpha was determined to evaluate the reliability of the measures. All Cronbach alpha's were found to be at least .800, and thus, meeting the required minimum of 0.7 (Edwards & Edwards, 2016). Factor analyses and reliability analyses can be found in Appendix B. Organizational justice and individual proactive behaviour were tested on the individual level in the employee questionnaire, whereas workplace performance had been tested on the organizational level in the owners' questionnaire.

*Organizational justice.* This concept was measured with the 16 items from Tsui, Peace, Porter & Tripoli (1997). All 16 items were answered on a five-point Likert scale: (1) Totally disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Totally agree. A sample item of this concept

was: “I am satisfied with the procedure used to deal with each worry or complaint I may have about the organization”. With regard to the reliability, previous research showed that the reliability was generally higher than 0.88 (Tsui et al., 1997). On the basis of the output of the factor analysis, the scree split revealed that there were two components, one with an Eigenvalue of 9.170 and one with an Eigenvalue of 1.362. However, all 16 components loaded above .708, which explained 57.32% of the variance. The Cronbach’s alpha of this scale was .949.

*Individual Proactive behaviour.* This concept was measured with 5 items from Van Veldhoven, Prins, Van der Laken & Dijkstra (2015) measuring taking initiative behaviour. These items could be answered on a five-point Likert scale: (1) Totally disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Totally agree. The scale revealed to be closely tied to the concept of proactive behaviour. The used scale by Van Veldhoven, Dorenbosch, Breugelmans & Van de Voorde (2017) adopted items such as “In my work, I take initiative even when others do not” and “At work, I make suggestions to improve work methods”. Scales based on proactive behaviours used items such as “I tried to introduce new structures, technologies, or approaches to improve efficiency” and “I tried to correct a faulty procedure or practice” (Fritz & Sonnetag, 2009; Parker & Collins, 2009) Previous research showed a reliability of 0.82 (Van Veldhoven et al., 2017). On the basis of the output, the scree plot showed that there was only component, which explained 69.98% of the variance explained, with all factor loading above .775. The Cronbach’s alpha was .888.

*Workplace performance.* This organization-level concept was measured with a combination of 9 items from the partnership items by Guest & Peccei (2001) measuring employee relations outcomes, contributions and commitment (Guest & Peccei, 2001). Although these particular items do not measure performance in its traditional and economic sense, they are indicative workforce performance. These items could be answered on a five-point Likert scale: (1) Very low, (2) Fairly low, (3) Moderate, (4) Fairly high, (5) Very high. Examples of these items are “The quality of ideas and suggestions coming from employees” and “The ability to attract high quality employees”. The research by Guest & Peccei (2001) showed that the reliability of the nine items - measured through three constructs - were 0.87, 0.73 and 0.83. Likewise, the output showed that there were indeed three distinct components, consisting of the same items as asserted by the previous research by Guest & Peccei (2001). However, only the first component, consisting of the last four items, demonstrated a sufficiently high Eigenvalue (See Appendix B). These items cover



“quality of ideas and suggestions coming from employees”, “contributions to innovation coming from employees”, “commitment of employees” and “flexibility of employees”. Hence, these have been chosen to represent workplace performance. Based on the output, the component explained 62.76% of the variance with all factor loading above .704. The Cronbach’s alpha was .800.

To measure the constructs *justice climate* and *shared levels of proactive behaviour*, individual measures were aggregated to the organization-level. Prior to this process, ICC values were calculated for these variables, in order to evaluate whether there was sufficient variance in the group level to allow aggregation (Bliese, 2000). In fact, intraclass coefficients were computed to investigate the proportion of total variance that could be explained by the group membership and the reliability of the group means - respectively measured by ICC1 and ICC2 - for the variables *justice climate* and *shared proactive behaviour*. These ICCs were calculated through separate one-way ANOVAs, where the variables of interest - justice climate and shared levels of proactive behaviour - were the dependent variable and the group membership the independent variables (Bliese, 2000). The calculations of both the ICC1 and ICC2 are shown in Appendix C.

*Justice Climate.* This organization-level concept is the result of an aggregation of all given responses of our sample to the items of organizational justice, also referred to as the direct consensus approach (Liao & Rupp, 2005). More specifically, organizational justice was aggregated to a higher group level of analysis resulting in mean group-level variables of organizational justice, referred to as justice climate (Peccei & Van de Voorde, 2016). Although previous literature has shown that justice climate is the result of individual and group perceptions of justice, Liao & Rupp (2005) have shown consistency by basing their research on the same rationale. The aggregation of this item has been done by averaging the responses on the organizational justice items for each organizations. The ICC1 of justice climate had a value of .247 and ICC2 had a value .614 of and the same test demonstrated that there are significant and reliable differences among different organizations, thus allowing group-level analysis ( $F = 2.589$ ,  $p = 0.000 < 0.05$ ). According to LeBreton & Senter (2008), ICC1 values ranging between .10 and .25 are considered medium to large effects, therefore, the ICC1 of justice climate can be said to be adequate. Likewise, in line with previous research by Fleiss (1999), ICC2 values ranging from .40 to .75 are fair to good, as is the case for justice climate in this research.

*Shared Proactive Behaviour.* This concept is constructed by aggregating the responses of each respondent to the 5 items from Van Veldhoven, Prins, Van der Laken & Dijkstra (2015)

measuring taking initiative behaviour. The aggregation of this item has been done by averaging the responses on the 'taking initiative' items for each organizations. Then, these averages for each organizations were aggregated on the organization-level. The aggregation of this item has been done by averaging the responses on the 'taking initiative' items for each organizations. Then, these averages for each organizations were aggregated on the organization-level. The ICC1 of shared proactive behaviour had a value of .060 and the ICC2 had a value of .245 and the same test also demonstrated that group-level analysis was allowed ( $F = 1.325$ ,  $p = .021 < 0.05$ ). Following the research by LeBreton & Senter (2008), one could say that the ICC1 of shared proactive behaviour represents a small to medium effect. However, in line with previous research by Fleiss (1999), the ICC2 value of shared proactive behaviour is found to be rather poor. This implies that while sufficient variance can be explained by the group membership – family firms – the mean ratings lack reliability at the group level (Bliese, 2000).

*Control variables.* To control for spuriousness, control variables at the individual as well as the group-level were added. With regard to the individual-level, five control variables were added: age, gender, education, tenure and the dummy variable family – to distinguish between family and nonfamily employees. Age and gender have initially been selected for the purpose of observing possible surprising differences in demographics in the results. However, previous research has shown that the age and gender as well as education and tenure are related to working conditions (Melamed, Ben-Avi, Luz, & Green, 1995). Furthermore, due to the inclusion of a group-level analysis organizational size and organizational sector have been added as well as the dummy variable to distinguish family from nonfamily employees, which has been aggregated to investigate the proportion of either type of employees for each family firm.

### ***Analysis***

To test the hypotheses, several steps have been undertaken. On the one hand, to test hypothesis 1 - at the individual level - a linear regression analysis has been conducted. On the other hand, to test hypotheses 2, 3 and 4 - at the organizational level - analysis have been conducted through the PROCESS MACRO (Hayes, 2013), an SPSS application aimed at measuring different types of models. In this study, one simple mediation was tested using model template four of PROCESS MACRO. Additionally, means, standard deviation and correlations were computed for both the individual level and organizational level.

## Results

### *Descriptives & Correlations*

The descriptives and correlations of the variables and the control variables from the individual level can be found in Table 1. As expected, organizational justice and individual proactive behaviour were positively correlated ( $r = .143, p < .01$ ). Some control variables were also correlated with both organizational justice and individual proactive behaviour. In fact, both family ( $r = .112, p < .01$ ) and gender ( $r = .110, p < .01$ ) were positively correlated with organizational justice, whereas age ( $r = -.090, p < .05$ ) was negatively correlated with organizational justice. With regard to individual proactive behaviour, it was positively correlated with family ( $r = .119, p < .01$ ), education ( $r = .131, p < .01$ ) and tenure ( $r = .121, p < .05$ ). One-way ANOVA revealed a significant positive effect of the level of education on individual proactive behaviour at  $p < .05$  for the 7 different answers [ $F(5, 599) = 2.857, p = .015$ ]. Additionally, other significant correlations were found among the control variables: between family and education ( $r = .232, p < .01$ ), between family and tenure ( $r = .103, p < .05$ ), between gender and education ( $r = .106, p < .01$ ), between education and age ( $r = -.217, p < .01$ ), between education and tenure ( $r = -.224, p < .01$ ) and between age and tenure ( $r = .548, p < .01$ ).

**Table 1:** Means (M), Standard Deviations (SD), and Correlations among variables; Individual level

	M	SD	1	2	3	4	5	6	7
1. Organizational Justice	3.393	.639							
2. Individual Proactive Behaviour	3.971	.578	.143**						
3. Family <sup>a</sup>	.267		.112**	.119**					
4. Gender <sup>b</sup>	.39		.110**	-.027	.018				
5. Education <sup>c</sup>	4.68	1.255	.016	.131**	.232**	.106**			
6. Age	40.34	13.211	-.090*	.057	.000	-.043	-.217**		
7. Tenure	8.751	9.258	-.018	.121*	.103*	-.035	-.224**	.548**	

The Mediating Effects of Individual Proactive Behaviour in the Relationship between Organizational Justice and Workplace Performance in Family Businesses

Notes: N varies from 576 to 617 due to missing values; \* $p < .05$  \*\* $p < .01$

<sup>a</sup> 0 = Nonfamily Employee, 1 = Family employee

<sup>b</sup> 0 = Men, 1 = Women

<sup>c</sup> 1 = No education, 2 = Primary school, 3 = Preparatory Intermediate Vocational School, 4 = Intermediate Professional Education, 5 = Secondary Education, 6 = Higher Education 7 = Academic Education 0 = Nonfamily Employee, 1 = Family employee

The descriptives and correlations of the variables and the control variables from the organizational level can be found in Table 2. Unexpectedly, shared proactive behaviour did not correlate with any of the two model variables. However, justice climate did correlate positively with workplace performance ( $r = .285$ ,  $p < .01$ ). On top of that, justice climate correlated with both the control variables; organizational size ( $r = -.327$ ,  $p < .01$ ) and family ( $r = .182$ ,  $p < .05$ ). Except these relations, only family correlated positively with the remaining control variable; sector ( $r = .258$ ,  $p < .05$ ).

**Table 2:** Means (M), Standard Deviations (SD), and Correlations among variables; Organizational level

	M	SD	N	1	2	3	4	5	6
1. Justice Climate	3.498	.529	122						
2. Shared Proactive Behaviour	3.985	.410	122	.162					
3. Workplace Performance	3.591	.592	108	.285**	.057				
4. Size	25.655	35.901	108	-.327**	.036	-.153			
5. Family	.297		122	.182*	.097	-.003	-.145		
6. Sector <sup>a</sup>	.583		90	-.109	.013	-.181	-.002	.258*	

Notes: N varies from 90 to 122 due to missing values \* $p < .05$  \*\* $p < .01$

<sup>a</sup> 0 = Service, 1 = Manufacturing

### Hypothesis Testing

In this research, four hypotheses were proposed based on previous literature. First and foremost, hypothesis 1 stated that higher levels of perceptions of organizational justice are positively related to higher levels of individual proactive behaviour on the individual-level. This hypothesis was tested using linear regression in SPSS. Individual proactive behaviour was filled in as the dependent variable and organizational justice and the control variables were filled in as

independent variables. Model summary of the linear regression (Table 3) reveals that the positive effect of organizational justice on individual proactive behaviour was indeed significant ( $\beta = .126$ ,  $p < .01$ ). Therefore, hypothesis 1 is accepted.

**Table 3:** Linear regression analysis w.r.t. Organizational justice, Individual proactive behaviour and the control variables (N=561)

Variables		$\beta$	SE	T	R2	F
Model summary					.065**	6.434
Outcome	Individual Proactive Behaviour					
Controls	Family	.067	.055	1.561		
	Gender	-.049	.049	-1.178		
	Education	.150**	.020	3/413		
	Tenure	.131**	.131	2.615		
	Age	.050	.002	1.006		
Predictors	Organizational Justice	.126**	.038	3.014		

\* $p < .05$  \*\* $p < .01$

Whereas hypotheses 1 was tested using a simple regression analysis, hypothesis 2, 3 and 4 were tested using PROCESS model 4 by Hayes (2012). Justice climate was filled in as the independent variable, shared proactive behaviour was filled as the mediator and workplace performance was filled as the dependent variable. As explained throughout this paper, this analysis was conducted on the organizational level. Given that, the control variables organizational size, sector and family were filled in the covariates box. The results of this analysis conducted through PROCESS MACRO were presented in Table 4, 5 and 6.

Hypothesis 2 stated that higher levels of justice climate are positively associated with higher levels of shared proactive behaviour at the organization-level. Model 1 (Table 4) reveals that this positive effect was indeed significant ( $b = .184$ ,  $p < .05$ ). Therefore, hypothesis 2 is accepted. Hypothesis 3 stated that higher levels of shared proactive behaviour within a family firm

are positively associated with workplace performance. Model 2 (Table 5) shows that this effect was not significant ( $b = -.088$ ,  $p = .632$ ). Therefore, hypothesis 3 is rejected.

Finally, hypothesis 4 stated that higher values of justice climate - or more positively perceived justice at the group-level - lead to higher levels of workplace performance and that this is mediated by shared proactive behaviour. Model 1 (Table 3) reveals that the positive effect of justice climate on shared proactive behaviour was indeed significant ( $b = .184$ ,  $p < .05$ ). However, model 2 (Table 4) reveals that the effect of shared proactive behaviour on workplace performance was not significant ( $b = -.088$ ,  $p = .632$ ). On top of that, model 2 (Table 4) shows an insignificant indirect effect. Therefore, hypothesis 4 is rejected. Nevertheless, Model 2 (Table 4) shows a positive significant effect of justice climate on workplace performance ( $b = .290$ ,  $p < .05$ ). Correspondingly, Table 5 reveals that both the total effect ( $b = .274$ ,  $p < .05$ ) and the direct effect ( $b = .290$ ,  $p < .05$ ) are significant. This would imply that justice climate is a significant predictor of workplace performance, except without the proposed mediation of shared proactive behaviour.

**Table 4:** Regression analysis using Process Model 4 w.r.t. Justice climate, Shared proactive behaviour, Workplace performance and the control variables (N=108)

	Variables	B	SE	T	LLCI	ULCI	R2	F
Model 1							.080	1.815
Outcome	Shared Proactive Behaviour							
Controls	Family	.043	.101	.421	-.159	.244		
	Sector	.019	.077	.245	-.134	.171		
	Size	.001	.001	.660	-.002	.004		
Predictors	Justice Climate	.184*	.073	2.519	.039	.330		

\* $p < .05$  \*\* $p < .01$

**Table 5:** Regression analysis using Process Model 4 w.r.t. Justice climate, Shared proactive behaviour, Workplace performance and the control variables (N=108)

	Variables	B	SE	T	LLCI	ULCI	R2	F
Model 2							.109	2.020
Outcome	Workplace performance							
Controls	Family	-.138	.171	-.808	-.477	.202		
	Sector	-.154	.129	-1.197	-.411	.102		
	Size	-.002	.003	-.601	-.007	.004		
Predictors	Justice Climate	.290*	.128	2.271	.036	.544		
	Shared Proactive Behaviour	-.088	.184	-.481	-.453	.277		

\* $p < .05$  \*\* $p < .01$

**Table 6:** Total, direct and indirect effects

	Variables	B	SE	T	LLCI	ULCI	R2	F
Effects								
	Total effect	.274*	.123	2.234	.030	.517		
	Direct effect	.290*	.128	2.271	.036	.544		
	Indirect effect	-.016	.040		-.114	.047		

\* $p < .05$  \*\* $p < .01$

## Discussion

In this cross-sectional study of 617 employees working in 122 family firms, a two level research examined the relations between organizational justice, individual proactive behaviour and workplace performance. More specifically, the relationship between organizational justice and proactive behaviour at the individual level was examined. Recently, organizational justice at the organizational level - or rather justice climates - has gained increasing attention from researchers. Such is less the case for proactive behaviour. However, previous research did show that

proactive behaviour at the organization-level – shared proactive behaviour - is associated with workplace performance. It is for these reasons that the relationship between justice climates and workplace performance - mediated by shared proactive behaviour – at the organization-level has been examined.

### ***Main findings***

First and foremost, based on the linear regression between perceived organizational justice and individual proactive behaviour - at the individual level - it seems that the level of proactive behaviour will be higher when there is a larger degree of organizational justice (Hypothesis 1). However, the control variable family – to make the distinction between family and nonfamily employees – proved to be insignificant in this relationship. This would imply being either a family or a nonfamily employee within a family firm is insignificant for the magnitude of the relationship between organizational justice and individual proactive behaviour. However, this finding does not contradict previous research stating that if nonfamily employees would be treated fairly it would improve their proactive behaviour (Barnett & Kellermans, 2006; Van der Heyden et al., 2005). Instead, this finding implies that family employees will also tend to show proactive behaviours if treated fairly. Equally important, this result confirms the rationale as asserted by the self-determination theory. That is, proactive behaviours are self-initiated and require motivation - both intrinsically and extrinsically. Organizational justice can provide individuals with the needs for competence, relatedness and autonomy in order to ensure motivation and as such, to consider proactive goals as fulfilling important life goals (Paker et al., 2010; Ryan & Deci, 2000).

As for the other three hypotheses, they were tested on the organization-level and through mediation analysis on PROCESS MACRO. Hypothesis 2 stated: “Higher levels of justice climate are positively associated with higher levels of shared proactive behaviour at the organization-level”. Based on the positive significant relationship found between justice climate and shared proactive behaviour, hypothesis 2 is also confirmed. This is in line with the social contagion theory which asserted that individuals share their thoughts and feelings, which is said to enhance interdependence among employees (Barsade, 2002; DeGoey, 2000). Subsequently, this collective perception of justice leading to interdependence is posited to increase the likelihood of displaying proactive behaviours collectively. Additionally, the control variable



family – to distinguish between family and nonfamily employees – was found to be insignificant. However, this finding is also consistent with previous research which had recognized the existence of sub-groups based on similar functions, backgrounds among other factors inside family firms (Van der Heyden et al., 2005). In other words, despite belonging to either the sub-group of nonfamily employees or family employees, a process of social contagion will occur. All in all, this implies that the more positive the group-level cognition of justice - as a result of interaction - among employees in family firms, the higher the likelihood to display shared levels of proactive behaviour, regardless of being a family or nonfamily employee.

Hypothesis 3 proposed: “Higher levels of shared proactive behaviour are positively associated with workplace performance at the organization level”. Despite previous research finding related evidence for the relationship between shared proactive behaviour and workplace performance (Crant, 1995; Druskat & Kayes, 2000; Van Dyne & LePine, 1998), the results show an insignificant relationship between shared proactive behaviour and workplace performance. Therefore, hypothesis 3 was not confirmed. An explanation for this finding may be that proactive behaviours are not always in favour of organizations (Belschak & Hartog, 2010). Correspondingly, this also seems to be in line with the definition of proactive behaviour itself. The definition speaks of self-directed, future-focused actions for change within oneself or the situation itself (Bindl & Parker, 2010). Belschak & Hartog (2010) reinforce this rationale by saying that only certain proactive behaviours, such as voice or personal initiative, are positively related to individual performance. Additionally, previous research showed that social embeddedness was proven to be vital for proactive behaviour to be of positive nature (Belschak & Hartog, 2010). Therefore, an alternative explanation could be that the sample of family firms – mostly consisting of nonfamily employees – are not sufficiently trusted, or involved within the firm and thus, lack social embeddedness.

The final hypothesis stated, “The relationship between justice climate and workplace performance is mediated by shared proactive behaviour at the organization level”. Despite the insignificance of this hypothesis, following the rationale of the self-determination theory one could expect a positive mediating effect of shared proactive behaviour on the relationship between justice climate and workplace performance. In fact, the self-determination theory asserts that organizational justice can satisfy the needs for competency, relatedness and autonomy required for the display of proactive behaviours, which in turn may contribute positively to

workplace performance (Parker et al., 2010; Ryan & Deci, 2010). Nonetheless, the results unexpectedly showed an insignificant mediating effect of shared proactive behaviour on the relationship between justice climate and workplace performance. Then again, shared proactive behaviour did also not correlate with neither workplace performance nor justice climate (Table 2), despite the positive association with justice climate (Table 4). Thus, despite justice climates laying the ground for shared proactive behaviour and workplace performance, through the satisfaction of the needs of competency, relatedness and autonomy, shared proactive behaviour remains unrelated to workplace performance. A theoretical explanation for this insignificant mediating relationship could be attributable to the inherent nature of the proactive behaviours. Given that the aims of proactive behaviours are generally defined as self-directed change to a situation and/or change within oneself, the nature of the displayed behaviour may be neither be negative or positive but in fact, completely unrelated to workplace performance (Bindl & Parker, 2010; Oxford English Dictionary, 2019). In other words, despite the apparent relationship between group-level justice perceptions on shared proactive behaviour, such behaviours may instead be contributing to different aims than the overall workplace performance. After all, proactive behaviours have been argued to require specific motivations (Ohly & Fritz, 2007). Thus, for shared proactive behaviour to contribute to workplace performance, specific motivation pertaining to creation of new ideas, direct contribution to innovative practices, flexibility and commitment – the definition of workplace performance throughout this research - may be required (Guest & Peccei, 2001).

From a practical point of view, a possible explanation for this insignificance could be the low proportion of explained variance of the model variables for the criterion; workplace performance. In fact, the model variables only explain about 8 to 10 percent of the total variance of workplace performance. Also, the reduction of the sample size from 205 organizations with a total of 1532 employees to 122 organizations – or rather, family firms – with a total of 617 employees may have impacted the results. On top of that, the total sample of family firms analyzed in Process Macro was a total amount of 89 due to missing values. Furthermore, the insignificance of the proposed relationship could also partly be attributable to the four items measuring workplace performance, which belonged to an initial scale composed of nine items that may have had further impact on these results. Furthermore, the control variable family was proven to be insignificant, meaning that being either a family or nonfamily employee did not

have an influence on either of the relationships. As an illustration, the group-level justice perceptions of all employees in family firms will positively influence the workplace performance, while the shared proactive behaviour of all employees in family firms are not related to workplace performance. As a result, one could suggest that the bifurcation bias – favouring family employees over nonfamily employees – did not impact the proposed relationships. Nevertheless, in addition to the relatively small sample size, the family firms in this sample consisted of roughly 70% nonfamily employees and 30% family employees

In addition to the proposed hypotheses, other findings were found to be noteworthy. For instance, a positive significant correlation was found between education and individual proactive behaviour at the individual level. An explanation for this positive correlation may be that highly educated employees may be recognized more in family firms. Given that family employees are assumed to be favoured in family firms and that the sample consist of mostly nonfamily employees, this finding may indicate that nonfamily employees in this sample overcome the bifurcation bias in family firms more than previous literature has asserted. More specifically, their knowledge and expertise may lead to them being favoured over family employees, which subsequently leads to these group of nonfamily employees to display more efforts in terms of proactive behaviour. Additionally, previous research has shown that the level of intelligence of an individual leads to performing tasks correctly and to engaging in behaviours directed at the organization - similar to proactive behaviours (Coté & Miners, 2006). Furthermore, a negative significant correlation was found between organizational size and justice climate. An explanation for this could be that as the amount of employees in an organization rises, the less group cohesion there will be among the workforce. In other words, sub-groups may continue to exist as asserted by Van der Heyden et al. (2005) but the group-level cognition may be more diverse within a firm as the size increases. Not only may it become more difficult to transfer your thoughts and feelings to other coworkers, finding mutual consent among a larger group of employees may even worsen this process. Also, previous research has shown that employment relations in smaller firms tend to be most conducive to good relationships and improved communications in comparison to medium-sized and larger firms (Matlay, 1999).

Furthermore, the results also suggest that shared proactive behaviours may have acted as a suppressor variable. A suppressor is generally defined as “a variable which increases the predictive validity of another variable by its inclusion in a regression equation” (MacKinnon,

Krull & Lockwood, 2000, p. 174). Similarly, Cheung & Lau (2008) define a suppressor variable by its increase of the predictive validity of the independent variable on the dependent variable, which is in line with the finding in this research. Correspondingly, the regression equation of justice climate – the independent variable – on workplace performance – the dependent variable – does indeed increase with the inclusion of the mediating variable – shared proactive behaviours (Table 6). Essentially, previous research asserts that a suppression effect is concluded when the the difference between the total effect and the direct effect is inferior to zero (Cheung & Lau, 2008; MacKinnon et al., 2000). In other words, when the total effect minus the standardized direct effect is inferior to zero, then a suppression effect has occurred. Given that both the total effect and the direct effect are found to be significant and that the subtraction of the direct effect from the total effect is inferior to zero ( $.290 - .274 = -.016 < 0$ ), one could conclude a suppression effect of shared proactive behaviour. However, for a suppression effect to occur a significant indirect effect remains a prerequisite (MacKinnon et al., 2000). Nevertheless, such results may be attributable to a relatively small sample size of 89 organizations in the analysis, the low proportion of explained variance by the model variables for the criterion workplace performance among other factors. As a result, an additional analysis has been carried out, which is summarized in the next paragraph.

### *Additional analysis*

Due to the insignificance of the mediating effect of shared proactive behaviours - on the relationship between justice climate and workplace performance – potentially stemming from a low sample size, analysis has been carried out accordingly. More specifically, the same analysis has been repeated on the total sample – specifically, the sample prior to the exclusion of firms with less than 25% of the shares / ownership in the hand of a family and corresponding employees. This initial dataset consisted of 205 organizations with a total of 1532 employees, whereas the dataset conforming to the criteria throughout this research consisted of 122 organizations and a total of 617 employees. Results can be found in Appendix D.

To summarize, the relationships considered in hypothesis 1 and hypothesis 2 between organizational justice and individual proactive behaviour at the individual level and organization-level remain significant and turn out stronger and. Unfortunately, the intraclass coefficients did not alter much, although group-level analysis was still allowed. Nonetheless, the analysis

essentially reveals a significant negative indirect effect of shared proactive behaviour on the relationship between justice climate and workplace performance, despite a rejection of hypothesis 3. Although the general consensus on determining mediation - as described by Mackinnon et al. (2000) - also includes a significant relationship between the mediating variable and the dependent variable, previous research contests this assumption. In fact, Hayes (2013) posits that an indirect effect can be significant, even when one of the paths through the mediator is insignificant. Therefore, a negative indirect effect of shared proactive behaviours on the relationship between justice climates and workplace performance occurs in the total sample. Equally important, the subtraction of the direct effect from the total effect is inferior to zero, meaning that shared proactive behaviour increased the predictive validity of justice climate for workplace performance, which is suggestive of a suppression effect (Cheung & Lau, 2008; MacKinnon et al., 2000). Also - in line with previous research - the suspected suppressor variable is completely unrelated to the dependent variable, while being strongly related to independent variable (Lewis-Beck, Bryman & Liao, 2013). All in all, a suppression effect from shared proactive behaviour on the relationship between justice climate and workplace performance can be concluded in the analysis on the total sample. Equally important for this research, the control variable family remained insignificant. Hence, belonging to either the sub-group of family or nonfamily employees did also not influence either of the proposed relationship in the analysis on the total sample.

### ***Strengths & limitations***

This study filled a theoretical gap in the literature by being the first to investigate the relationship between organizational justice, proactive behaviours and workplace performance in a two level study. Nevertheless, due to the fact that this research has a cross-sectional design, the data collected during this research cannot prove any causal effect (Singleton Jr. & Straits, 2005). Although it may not have harmed this study too considerably, conducting a longitudinal study on the change of organizational justice, proactive behaviours and consequently, workplace performance could have been of higher value. In particular, if measures are undertaken after the first wave of data collection in terms of practices to improve the perceived fairness in a family firm. Additionally, this may benefit the family firm research stream considerably. In spite of the disadvantage of this cross-sectional design, this study mitigated the influence of common source variance (i.e. variance caused by measurement method instead of constructs; Podsakoff, 2003) leading to a higher validity

of conclusions about the relationships. In fact - and in line with research by Podsakoff (2003) - this study did so by protecting the anonymity of all respondents, ensuring respondents that there were no right or wrong answers, and by obtaining measures from different sources.

Another limitation is the lack of research on proactive behaviour, in particular at the organizational level, indicating that it may be a complex construct to aggregate conceptually. Nevertheless, this study controlled for organizational effects on proactive behaviour by investigating the intraclass coefficients prior to the aggregation of this concept - as was also done for organizational justice. Additionally, most previous literature researched facets of proactive behaviour - such as proactivity, voicing out concerns among others - instead of the concept in its entirety (Crant, 1995; Van Dyne & LePine, 1998). As a result, the relationship between proactive behaviour as a whole and workplace performance lacked clear substantial research. Furthermore, despite proactive behaviour not yet being recognized as a well-established concept at the organizational level, previous research has shown that organizational justice - or rather justice climate - has been researched abundantly. As a matter of fact, previous research has shown that justice climates are not simply the results of an aggregation of the concept of organizational justice, but instead justice perceptions as a result of interaction among employees. Given that this study did not incorporate items for justice climates, it limits the substantial value it may have for the literature stream on justice climates.

Finally, workplace performance faced several limitations partly attributable to the four aspects of employee performance covered in this study: “quality of ideas and suggestions coming from employees”, “contributions to innovation coming from employees”, “commitment of employees” and “flexibility of employees”. On the one hand prior to the analysis the concept of employee performance consisted of nine items. In line with the research by Guest & Peccei (2001), a factor analysis revealed that this concept was composed of three separate concepts. On the other hand, although the items used in this study are certainly representative of workplace performance, the performance of employees in its traditional sense tends to be a broader concept. For instance, Konovsky & Cropanzano (1991) measure workplace performance on the basis of performance appraisals on job accountabilities, five general performance areas and relative to the objective-quarterly goals. That is to say that the concept of workplace performance varies for most studies. Nevertheless, for this reason it is difficult to compare this current study with other studies that have used the complete scale by Guest & Peccei (2001).

### ***Future research***

A further research could consider treating justice climates and organizational justice as two distinct topics - as made explicit by the literature (Li et al., 2010; Naumann & Bennet, 2000). In fact, an individualistic approach to organizational justice fails to fully grasp the social context within which the justice perceptions are shaped (Li & Cropanzano, 2009). However, given the group interaction being key for the conceptualization of justice climate, further research may require alternate methods. For instance, Roberson (2006) measured justice climates through a concept referred to as intergroup justice comparisons. This concept was composed of four items to assess the extent to which participants made intergroup comparisons in the process of forming justice-based judgements. Furthermore, future research should also pay closer attention to the conceptualization of workplace performance. To better understand the effects of both organizational justice and proactive behaviours on workplace performance, it would be worthwhile to find consensus on which aspects of workplace performance are most related to these former topics. In the same fashion, further research could investigate the same relationship by using the entire scale by Guest & Peccei (2001), or instead rely on a more recent scale.

Additionally, given that proactive behaviours were found to not always be in favour of organizations (Belschak & Den Hartog, 2010), future research could instead investigate the same relationship with two mediating variables; one consisting of proactive behaviours in favour of organizations and one consisting of opposite proactive behaviours. In the same vein, another closely interrelated mediating variable could be compared, such as OCB (i.e. Organizational Citizenship Behaviour). As matter of fact, Belschak & Den Hartog (2010) found that proactive behaviours are to some extent related to OCB as they are both discretionary employee behaviours. Similarly, future research could also investigate to what extent proactive behaviours - or OCB for that matter - depend on the nature of the job.

### ***Practical implications***

The results of this study confirm that organizational justice is indeed related to proactive behaviour – at the individual- and organization-level – and workplace performance, while proactive behaviour at the organization-level – shared proactive behaviour - is not related to workplace performance. On the other hand, contrary to what had been asserted by previous research, being a family or nonfamily employee in a family firm did not have any influence on either of the

relationships. In other words, family firms appear to have gone beyond the bifurcation bias in the best interest of their firm. Given that approximately 80% of the workforce in the context of family firms consists of nonfamily employees – and are therefore, vital – family firms should promote fair treatment of all employees and practices that are free of such bias (Barnett & Kellermans, 2006; Verbeke & Kano, 2012).

The results of this study also have noteworthy implications for the influence of proactive behaviours on the relationship between justice climates and workplace performance. In fact, additional analysis revealed a suppression effect of proactive behaviours at the organization level. As a result, organizations should bear in mind that allowing higher levels of control and opportunities to take initiative or voice concerns for all employees may strengthen the effect fair treatment can have on workplace performance.

## **Conclusion**

The research question of this study was “*To what extent does justice as perceived by non-family employees relate to workplace performance in family firms, and to what extent is this relation mediated by shared proactive behaviour?*”. The results of this study revealed that organizational justice predicts workplace performance, which becomes stronger with the inclusion of shared proactive behaviour. Nevertheless, shared proactive behaviour does not mediate this relationship, nor does it suppress this relationship as the increase of the direct path might suggest. These findings are in line with the self-determination theory (Parker et al., 2010; Ryan & Deci, 2000) and the social contagion theory (Barsade, 2002; Goey 2000), which have been applied throughout this thesis (Parker et al., 2010; Ryan & Deci, 2000). Moreover, additional analysis on the total sample – with both family and nonfamily firms - did reveal a significant suppression effect. Furthermore, the results of this study showed that the distinction between family and nonfamily employees does not explain any variation in the proposed relationships, which is indicative of a diminishing of the bifurcation bias (Barnett & Kellermans, 2006). All in all, this research has shown that organizational justice predicts proactive behaviours and workplace performance in family firms.



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### Appendix A: Questionnaires

<b>Organizational Justice</b>	Totally Disagree	Disagree	Neutral	Agree	Totally Disagree
<i>Overall Fairness Perception</i> (Tsui, Pearce, Porter & Tripolo, 1997)					
1. The process used to connect my performance appraisal is fair	1	2	3	4	5
2. The process used to determine my salary is fair	1	2	3	4	5
3. The process used to make decisions about my promotions or job changes within this organization is fair	1	2	3	4	5
4. The process used to address any concerns or complaints I voice about this organization is fair	1	2	3	4	5
5. I am satisfied with the way my performance appraisals are conducted in this organization	1	2	3	4	5
6. I am satisfied with the process used to address any concerns or complaints I voice about this organization	1	2	3	4	5
7. I am satisfied with the process used to make decisions about my promotions or job changes with the organization	1	2	3	4	5
8. I am satisfied with the process used to determine my salary	1	2	3	4	5
9. The rating or evaluation I received on my last performance appraisal was fair	1	2	3	4	5
10. The amount of pay that I receive is fair	1	2	3	4	5
11. The decisions made about my promotions or job changes within this organization are fair	1	2	3	4	5
12. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or response are fair	1	2	3	4	5
13. The rating or evaluation I received on my last performance appraisal reflected what I deserved	1	2	3	4	5
14. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or responses reflect what I deserve	1	2	3	4	5
15. The decisions made about my promotions or job changes within this organization reflect what I deserve	1	2	3	4	5



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16. The amount of pay that I receive reflects the amount that I deserve	1	2	3	4	5
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<b>Individual Proactive Behaviour</b>	Totally Disagree	Disagree	Neutral	Agree	Totally Disagree
<i>Taking initiative</i> - (Van Veldhoven, Dorenbosch, Breugelmans & Van De Voorde, 2017)					
1. In my work I take initiative even when others do not	1	2	3	4	5
2. I discuss work methods with my superior if I think they can be improved	1	2	3	4	5
3. At work, I make suggestions to improve work methods	1	2	3	4	5
4. When work methods or procedures are not effective, I try to do something about it	1	2	3	4	5
5. When something is not right about the manner in which the work is done, I try to improve that	1	2	3	4	5

<b>Workplace Performance</b>	Very Low	Fairly Low	Moderate	Fairly High	Very High
<i>Employees</i> - (Guest & Peccei, 2001)					
<i>Employee Contributions</i>					
1. The quality of ideas and suggestions coming from employees	1	2	3	4	5
2. The contribution to innovation coming from employees	1	2	3	4	5
<i>Employee Commitment</i>					
3. The commitment of employees	1	2	3	4	5
4. The flexibility of employees	1	2	3	4	5

## Appendix B: Factor Analyses

### Organizational justice (w/ Varimax rotation)

Overall Fairness Perception	<i>Components</i>	
	1	2
1. The process used to connect my performance appraisal is fair	.546	.449
2. The process used to determine my salary is fair		.788
3. The process used to make decisions about my promotions or job changes within this organization is fair	.584	.548
4. The process used to address any concerns or complaints I voice about this organization is fair	.803	
5. I am satisfied with the way my performance appraisals are conducted in this organization	.710	
6. I am satisfied with the process used to address any concerns or complaints I voice about this organization	.831	
7. I am satisfied with the process used to make decisions about my promotions or job changes with the organization	.622	
8. I am satisfied with the process used to determine my salary		.811
9. The rating or evaluation I received on my last performance appraisal was fair	.661	
10. The amount of pay that I receive is fair		.850
11. The decisions made about my promotions or job changes within this organization are fair	.545	.576
12. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or response are fair	.756	
13. The rating or evaluation I received on my last performance appraisal reflected what I deserved	.582	.484
14. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or responses reflect what I deserve	.704	
15. The decisions made about my promotions or job changes within this organization reflect what I deserve	.535	.623
16. The amount of pay that I receive reflects the amount that I deserve	.	.845
<i>Eigenvalue</i>	9.170	1.362
<i>Cronbach's Alpha</i>	.949	

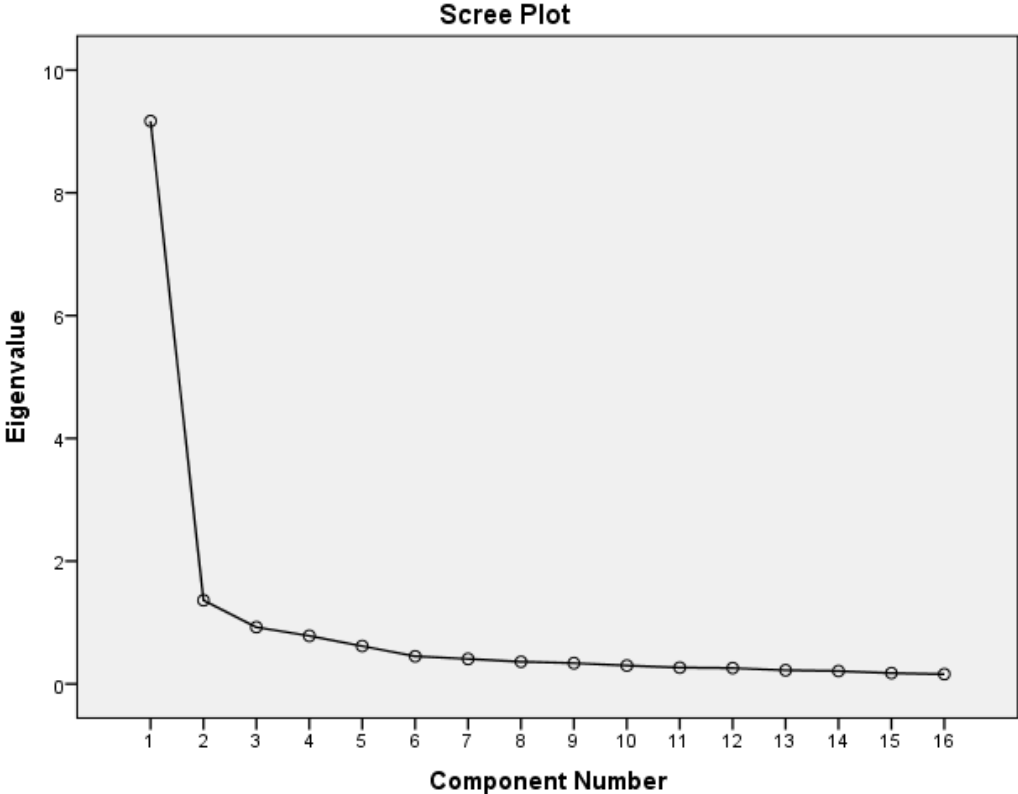
### Organizational Justice (Final component)

Overall Fairness Perception	<i>Factor loadings</i>
1. The process used to connect my performance appraisal is fair	.719
2. The process used to determine my salary is fair	.761
3. The process used to make decisions about my promotions or job changes within this organization is fair	.801
4. The process used to address any concerns or complaints I voice about this organization is fair	.710
5. I am satisfied with the way my performance appraisals are conducted in this organization	.736
6. I am satisfied with the process used to address any concerns or complaints I voice about this organization	.741
7. I am satisfied with the process used to make decisions about my promotions or job changes with the organization	.818
8. I am satisfied with the process used to determine my salary	.806
9. The rating or evaluation I received on my last performance appraisal was fair	.709
10. The amount of pay that I receive is fair	.708
11. The decisions made about my promotions or job changes within this organization are fair	.791
12. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or response are fair	.727
13. The rating or evaluation I received on my last performance appraisal reflected what I deserved	.756
14. If I voice my concern or disagreement about something in this organization, the organization's resulting actions or responses reflect what I deserve	.758
15. The decisions made about my promotions or job changes within this organization reflect what I deserve	.815
16. The amount of pay that I receive reflects the amount that I deserve	.742
<i>Eigenvalue</i>	9.170
<i>Cronbach's Alpha</i>	.949

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Extraction Method: Principal Component Analysis

a. 2 components extracted

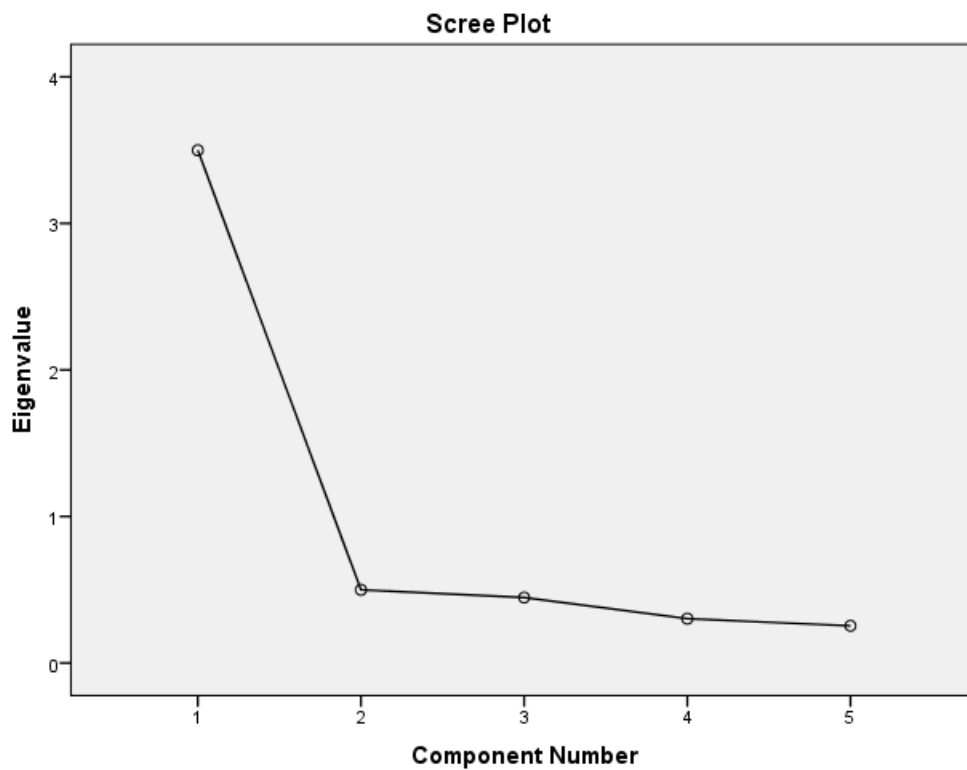


## Individual Proactive Behaviour

Taking initiative	Factor loadings
1. In my work I take initiative even when others do not	.775
2. I discuss work methods with my superior if I think they can be improved	.812
3. At work, I make suggestions to improve work methods	.870
4. When work methods or procedures are not effective, I try to do something about it	.854
5. When something is not right about the manner in which the work is done, I try to improve that	.867
<i>Eigenvalue</i>	3.499
<i>Cronbach's Alpha</i>	.888

Extraction Method: Principal Component Analysis

a. 1 component extracted

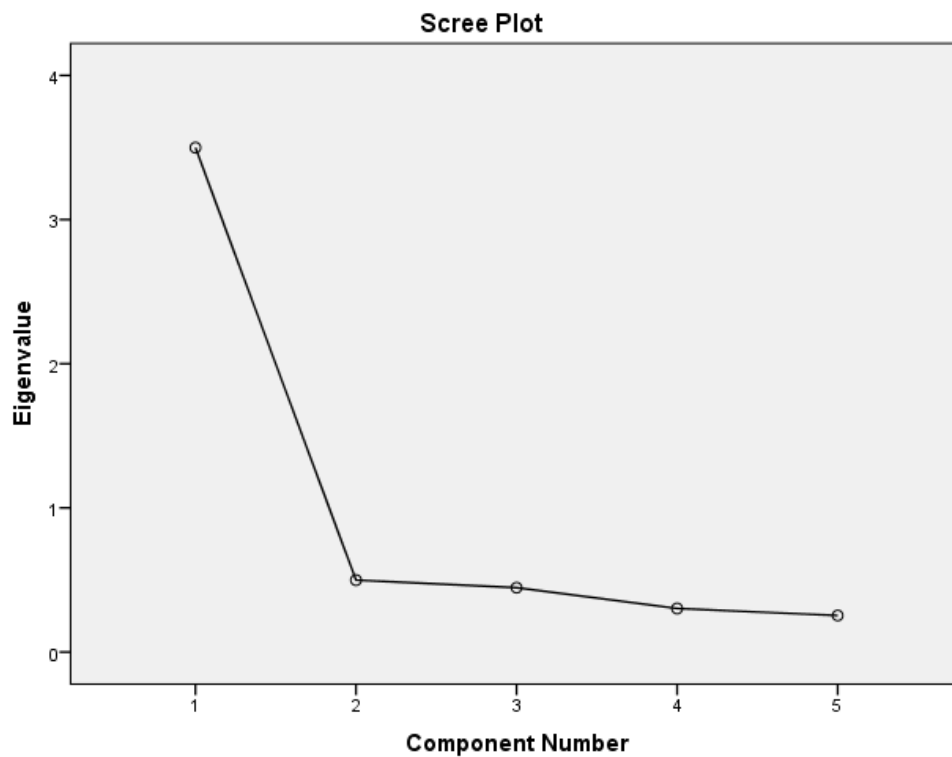


## Workplace Performance

Workplace performance	Factor loadings
1. The quality of ideas and suggestions coming from employees	.833
2. The contribution to innovation coming from employees	.854
3. The commitment of employees	.769
4. The flexibility of employees	.704
<i>Eigenvalue</i>	2.551
<i>Cronbach's Alpha</i>	.800

Extraction Method: Principal Components Analysis

a. 1 component extracted



### Appendix C: One-way Anova

		Sum of Squares	df	Mean Square	F	Sig.	ICC1*	ICC2* *
<b><i>Justice Climate</i></b>	Between groups	96.417	121	.797	2.589	.000	.247 <sup>a</sup>	.614 <sup>c</sup>
	Within groups	144.360	469	.308				
	Total	240.776	590					
<b><i>Shared Proactive Behaviour</i></b>	Between groups	50.308	121	.416	1.325	.021	.060 <sup>b</sup>	.245 <sup>d</sup>
	Within groups	154.709	493	.314				
	Total	205.016	614					

\* $ICC1 = (Between\ group\ variance - Within\ group\ variance) / [Between\ group\ variance + (k-1) * Within\ group\ variance]$

$k = df\ Between - df\ Within / df\ Between$

\*\* $ICC2 = (Between\ group\ variance - Within\ group\ Variance) / Between\ group\ variance$

## Appendix D: Additional Analysis

### Appendix D1: ICC1 and ICC2 for Justice Climate and Shared Proactive Behaviour

		Sum of Squares	df	Mean Square	F	Sig.	ICC1 *	ICC2 **
<b>Justice Climate</b>	Between groups	165.039	203	.813	2.704	.000	.197 <sup>a</sup>	.630 <sup>c</sup>
	Within groups	362.841	1207	.301				
	Total	527.879	1410					
<b>Shared Proactive Behaviour</b>	Between groups	108.698	203	.535	1.582	.000	.077 <sup>b</sup>	.368 <sup>d</sup>
	Within groups	415.984	1229	.338				
	Total	524.682	1432					

\* $ICC1 = (Between\ group\ variance - Within\ group\ variance) / [Between\ group\ variance + (k-1) * Within\ group\ variance]$

$k = df\ Between - df\ Within / df\ Between$

\*\* $ICC2 = (Between\ group\ variance - Within\ group\ Variance) / Between\ group\ variance$

### Appendix D2 Linear regression analysis w.r.t. Organizational justice, Individual proactive behaviour and the control variables (N=629)

	Variables	$\beta$	SE	T	R2	F
Model summary					.076**	8.554
Outcome	Individual Proactive Behaviour					
Controls	Family	.063	.052	1.565		
	Gender	-.068	.046	-1.740		
	Education	.147**	.019	3.584		
	Tenure	.135**	.003	2.896		
	Age	.054	.002	1.179		
Predictors	Organizational Justice	.168**	.035	4.278		

\* $p < .05$  \*\* $p < .01$



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**Appendix D3:** Means (M), Standard Deviations (SD), and Correlations among variables;

Organizational level

	M	SD	N	1	2	3	4	5	6
1. Justice Climate	3.424	.402	204						
2. Shared Proactive Behaviour	3.950	.346	204	.306**					
3. Workplace Performance	3.578	.570	187	.284**	.035				
4. Size	28.941	32.091	185	-.215**	.057	-.120			
5. Family	.292		146	.096	.064	-.065	-.058		
6. Sector <sup>a</sup>	.480		153	.052	-.044	-.085	-.047	.194*	

Notes: N varies from 146 to 204 due to missing values \* $p < .05$  \*\* $p < .01$

<sup>a</sup> 0 = Service, 1 = Manufacturing

**Appendix D4:** Regression analysis using Process Model 4 w.r.t. Justice climate, Shared proactive behaviour, Workplace performance and the control variables (N=109)

	Variables	B	SE	T	LLCI	ULCI	R2	F
Model 1							.130**	4.850
Outcome	Shared Proactive Behaviour							
Controls	Family	-.011	.079	-.137	-.167	.146		
	Sector	.003	.060	.044	-.116	.121		
	Size	.001	.001	1.245	-.001	.004		
Predictors	Justice Climate	.315**	.072	4.365	.172	.458		

\* $p < .05$  \*\* $p < .01$

The Mediating Effects of Individual Proactive Behaviour in the Relationship between Organizational Justice and Workplace Performance in Family Businesses

**Appendix D5:** Regression analysis using Process Model 4 w.r.t. Justice climate, Shared proactive behaviour, Workplace performance and the control variables (N=109)

	Variables	B	SE	T	LLCI	ULCI	R2	F
Model 2							.166**	4.111
Outcome	Workplace performance							
Controls	Family	-.264	.148	-1.783	-.558	.030		
	Sector	-.124	.112	-1.105	-.346	.099		
	Size	-.003	.002	-1.407	-.007	.001		
Predictors	Justice Climate	.483**	.147	3.282	.191	.775		
	Shared Proactive Behaviour	-.298	.184	-1.621	-.663	.067		

\* $p < .05$  \*\* $p < .01$

**Appendix D6:** Total, direct and indirect effects

	Variables	B	SE	T	LLCI	ULCI	R2	F
Effects								
	Total effect	.389**	.136	2.854	.119	.659		
	Direct effect	.483**	.147	3.282	.191	.775		
	Indirect effect	-.094*	.052		-.202	-.001		

\* $p < .05$  \*\* $p < .01$