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Innovativeness and Firm Performance in Apparel Firms in Sri Lanka: The Moderating Role of Family Continuity

GS Nanayakkara[1], Mohd Shukri Ab Yajid[2], Ali Khatibi[3], SM Ferdous Azam[4], Jacquline Tham[5]

Graduate School of Management, Post Graduate Centre, Management and Science University, University Drive, Off Persiaran Olahraga, Section 13, 40100, Selangor, Malaysia.

gayashini@gmail.com[1]

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Abstract:

Purpose: Empirical evidence relating to the link between innovativeness and performance is largely unequivocal with innovativeness significantly influencing firm performance. However, the influence of the family dynamic on this relationship is not well established and few studies have been carried out that explores the influence of family context on the innovativeness –performance relationship. The objective of this article is to examine the influence of family continuity and its relationship with innovativeness and firm performance in an under-examined industry and country context using the resource based view.

Method: The study methodology was survey based and took place in the apparel sector in Sri Lanka. The sample frame was 234 registered apparel firms with the Export Development Board (EDB) of Sri Lanka.

Findings: Family continuity is moderating the relationship between innovation and firm performance when the moderator is strong as well as weak. In situations that family continuity is low, the influence of innovation on performance is greater and significant compared to high family continuity' circumstances. Higher family continuity weakens the impact of innovation on firm performance. Family continuity has a large effect on the endogenous variable firm performance and contributes in a very significant way to the endogenous construct, firm performance. Therefore, there is a large negative moderation effect in the model as family continuity weakens the relationship between innovation and performance

Research Limitations: The generalizability of the findings are limited by the focus on a single country setting. The study is also confined to the apparel sector and applicability of the findings to other sectors is not easily generalizable due to differences in organizational practices.

Novelty – Whilst the relationship between innovativeness and firm performance has been assessed, this is among the first theoretically sensitized studies linking resource based view, family continuity, innovativeness and firm performance in a developing country context. Prior family business empirical research has focused on Western European or US contexts and studies from developing family business country contexts are limited.

Keywords: Innovativeness, firm performance, family continuity, resource based view, family business

1. Introduction

Businesses today exist in a competitive landscape and innovation is key to sustain competitive advantage. Innovativeness is broadly influenced by the business landscape and should be analysed beyond encouraging activities related to product development. This research focuses specifically on the family business context and is defined as 'businesses governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition shaped and 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' (Chua et al, 1999. P.25).

Family businesses are often perceived as complex systems due to the interplay of the family, its individuals and the business which is considered to be a unique and synergistic resource through the theoretical lens of Resource based view (Bargoni, Alon & Ferraris. 2023). Familiness; i.e. the owner family's input to the firm, affects a firms ability to innovate and thereby the performance of the firm. Familiness is an important resource for family owned businesses and it has the potential to influence a firm's ability to innovate and influences firm performance (Hatak et al, 2016). Few studies have analysed the influence of the family dynamic on innovation and firm performance. There are limited studies that have analysed the influence of familiness on innovation and performance (Reina, pla-Barber & Villar, 2023). Kellermanns et al. (2012) analysed the influence of family dynamics and its impact on firm performance. Hatak et al (2016) explored the moderating effect of family commitment on the relationship between innovativeness and firm performance. There is no prior research on the impact of continuing family legacy through the business and its effect on innovation and performance. Kellermanns et al (2012) study is the closest study that centers around this topic, analysing how family dynamics influence the ability to innovate and firm performance. However, Kellermanns et al (2012) do not specify how family dynamics such as family's commitment to family values and continuing the family legacy through the propagation of the business – family continuity influence the innovativeness – firm performance relationship. More specifically, the current research addresses the business family's commitment to family values and continuing the family legacy through the propagation of the business – family continuity- and examines how it moderates the innovativeness -firm performance relationship. Family continuity is perceived as an intangible and unique family resource and the hypotheses draw upon the resource based view (RBV) of the firm (Barney, 1991) and prior empirical research (Nordqvist, 2005, Hatak, 2016, Lobo et al, 2023) that draws on the influence of family specific and firm specific resources that underpin firm performance.

Scholars (Picone et al, 2021; Lopez -Gomez, 2015) have argued for greater focus on developing countries since the majority of research has taken place in developed country settings often adopting a dichotomy of family versus non-family firms. The current research study identifies family continuity, i.e maintaining family values and identity preservation as a manifestation of familiness and how it moderates the innovation – performance relationship. The theoretical lense of the resource based view is used to develop hypotheses drawing from previous research studies (Hatak et al, 2016). This empirical study is based on cross sectional data from 132 family owned apparel exporting firms in Sri Lanka.

2. Contribution of the Study to Theory Testing

This study contributes to the under developed research on innovativeness in family firms by explaining how family continuity influence the relationship between innovativeness and firm performance. This study contributes to our understanding of the Resource Based View led research on family firms by increasing our knowledge of the unique interplay between family and firm specific resources and their subsequent influence on firm performance during the development and launch of new products. The findings of this study heed calls by Rosenbusch et al. (2011), Duran et al (2016), Hatak et al (2016) for a more contextualized setting to operationalize the influence of innovativeness on performance by analysing the unique and common organizational setting of a family business. Calls have been made by De Massis et al (2018) & Calabro et al (2019) as well as Picone et al (2021) to analyse innovativeness in family businesses in different sectoral contexts giving more prominence to the sectoral conditions. It is important to understand how family business heterogeneity influences innovativeness (Chrisman et al, 2015; Jaskiewicz et al, 2017) as family influence could influence organizational goals (Urbinati et al, 2017), risk taking (Jansen et al, 2023) and investment decisions (Lumpkin & Brigham, 2011) and this study aims to fulfill this gap. More significantly, the findings of this study extend the understanding of innovation and firm performance in family business contexts. This study also recommends that owner families should embrace continuity and change and encourage innovation within the family business since typically owner involvement has led to reduced innovative behaviours.

3. Literature Review

Firm innovativeness refers to the inclination and preference of a firm to engage with new ideas that may lead to the development of new products. Previous empirical findings are largely unequivocal in expressing support for innovativeness as a key driver of firm performance (Meelad et al, 2024). R & D investments (Zhang et al, 2022; Carvalho et al, 2017), intellectual stimulation (Zmich, Groza & Groza, 2022; Groza, Zmich & Rajabi, 2021), absorptive capacity (Sanch-Zamora et al, 2021; Hong & Kim, 2020), learning orientation (Mutonyi, Slatten & Lien, 2020; Nair, 2019; Holtgrave et al, 2019), entrepreneurial orientation (Correa, Queiroz & Shigaki, 2021; Kock & Gemunden, 2021; Arunachalam et al, 2018), market orientation (Alhakimi & Mahmoud, 2020; Phorncharoen, 2020, Sahibzada et al, 2020; Wang & Miao, 2015) patents (Kumar, Liu & Zaheer, 2021; Rodriguez & Wiengarten, 2017; Keller, 2012), transformational leadership (Kucharska & Rebelo, 2022; Ardi et al, 2020) and new products (Ozdemir et al, 2020; Langerak & Hultink, 2006) support key innovativeness actions that directly affect firm performance.

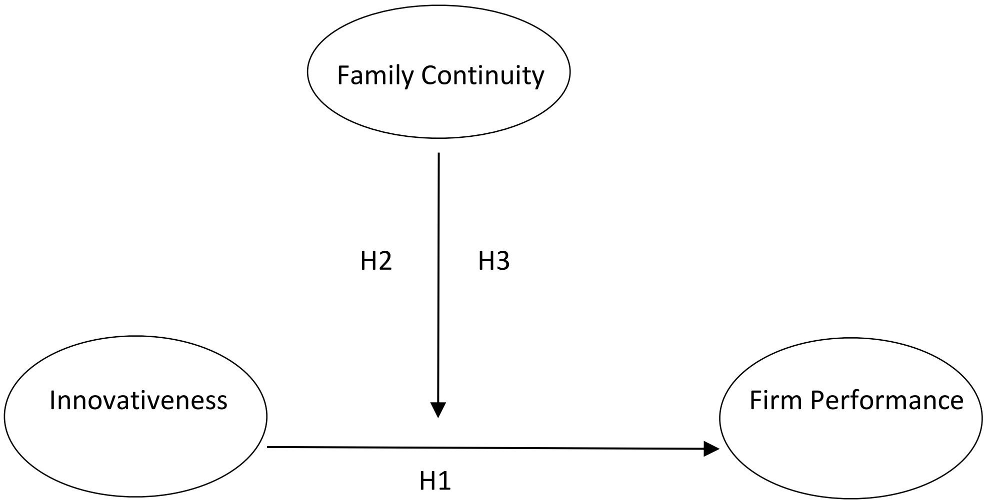
Family businesses have always had a rather ambivalent influence on innovation and the empirical findings have been inconclusive. Some scholars have established that innovativeness thrives in family businesses, while others have argued that the family dynamic leads to a decline in innovativeness. Familiness has the ability to influence a firms ability to innovate and affect firm performance. Few studies have analysed the influence of the family dynamic on innovation and firm performance. Kellermanns et al. (2012) analysed the influence of family dynamics and its impact on firm performance. Hatak et al (2016) explored the moderating effect of family commitment on the relationship between innovativeness and firm performance. Craig, Dibrell and Garrett (2014) argued that family dynamics influences firm innovativeness and performance. Tsao, Lin & Chen (2015) revealed that family involvement positively moderated the relationship between R & D investments and CEO compensation in family businesses. However, these studies do not specify the specific family dynamics – collective decision making, power, culture and legacy – that influence the innovativeness – performance relationship and more contextualized research studies have been proposed to discover insights into this relationship (Barros – Contreras, 2022; Heider et al, 2022).

Apparel firms in Sri Lanka face widespread competition and innovation is key to sustaining themselves in the market. The majority of apparel firms are family-owned (Embuldeniya, 2015) and therefore, provides a rich contextual landscape to carry out the research study. Innovation is critical in the apparel sector as it directly helps to enable firms to compete and survive. Collaboration between firms and suppliers have enabled innovation and joint developments and strategic partnerships seems to have replaced contract based relationships in large firms (De Silva & Rupasinghe, 2016). The end of the Multi Fibre Agreement (MFA) in 2005 eliminated the quota system for Sri Lankan apparel manufacturers. Value creation through innovation of new products and new technology inputs are vital to sustain competitiveness for Sri Lankan apparel firms. Larger apparel firms are significantly innovative and have patents to their credit compared to smaller firms (Gunawardena, Cooray & Fonseka, 2014). At present, apparel industry in Sri Lanka amounts for 42% of total exports becoming the largest single exporter, eclipsing tea trade (Department of Census & Statistics Sri Lanka, 2018). The majority of apparel firms in Sri Lanka are small or medium scale while there are a few large firms. Innovations can act as barriers to entry, create high switching costs but also provide a competitive edge for apparel firms (Weerawansa & Hewage, 2023; Ekanayake & Gunawardana, 2018).

Apparel firms in Sri Lanka are experiencing high labour shortage and turnover (Sri Lanka Labour Demand Survey, 2020) which directly affects innovation and firm performance (Pathirana & Yarime, 2018). This problem is further accentuated by the lack of demand for apparel jobs (Sirinaga, Khatibi & Azam, 2019) mainly due to lack of benefits, reduced pay and inappropriate qualifications (Wijewardhana et al, 2021; Fernando et al, 2020). Monotony and less flexibility in the job coupled with increased pressure to improve productivity have made occupations less demanding (Fernando et al, 2020). The difficulties in retaining staff in semi –skilled and unskilled jobs (Fernando et al, 2020; Welmilla, 2020) have led to less innovations. Generally local apparel firms of which the majority are family owned (Embuldeniya, 2015), have been slow to innovate and experiment with new ideas and this has affected the performance (Ranaweera, 2014; Perera & Dilshani, 2017). Funding constraints (Deyshappriya, Wickramasekera & Deminda, 2019), lack of technical skills and weak ties (Ranaweera, 2014; Sudusinghe, Jayaratne & Kumarage, 2018; Akter, 2019) with partners have led to reduced innovation and has severely affected competitiveness of Sri Lankan apparel industry. The majority of research studies have analysed the impact of innovativeness on firm performance in developed countries. Recent empirical findings (Ngoasong, 2018; Urban & Van der Putten, 2021) reveal that innovativeness improves firm performance in resource scarce environments including developing country contexts.

The following conceptual model is derived from the empirical as well as theoretical literature review and identifies the moderating impact of family continuity on the relationship between firm innovativeness and performance.

Figure1: Conceptual Model



3.1 Firm Innovativeness and Firm Performance

The family dynamic enables firms to compete effectively (Cano-Rubio et al, 2021; Daspit, Long & Pearson, 2019; Dalpiaz, Tracey and Phillips, 2014; Zahra et al, 2008, Le-Breton Miller & Miller, 2006; Habbershon et al, 2003, Sirmon & Hitt, 2003; Habbershon & Williams, 1999) since it creates a unique bundle of resources (Habbershon et al, 2003) due to the overlap between the family and the firm. However, several studies have revealed contradictory findings leading to inconclusive research findings. The unique interplay between family and the firm gives rise to a unique set of firm specific skills, resources and strategies that can be leveraged to create competitive advantage (Heider et al, 2022; Cano-Rubio et al, 2021; Daspit, Long & Pearson, 2019; Zellweger, Eddleston & Kellermanns, 2010; Habbershon & Williams, 1999). The resource based view has been used to explain the firm specific bundle of dynamic, rich and complex resources in family owned businesses and examines the relationship between the firms internal characteristics and performance levels (Zahra, 2021; Kellermanns et al, 2016; Arregle et al, 2007; Habbershon & Williams, 1999).

The resource based view (Barney, 1991; Wernerfelt, 1984; Penrose, 1959) posits that a combination of dynamic, complex and intangible resources are necessary to achieve sustainable competitive advantage. When resources are valuable, unique, hard to imitate and non-substitutable, this creates a unique advantage for the firm. Innovativeness is a rare and inimitable resource that is essential to generate sustainable advantage. Resource based view identifies innovativeness as a critical resource (Bryan Jean et al, 2017; Hatak et al, 2016; Cho & Pucik, 2005) or as generating resources which can be leveraged for competitive advantage (Riswanto et al, 2020; Ng, Kee & Ramayah, 2020; Chen, 2018; Barney, 1991), or through dynamic capabilities (Teece et al, 1997) or as a way to learn (Jiménez-Jiménez, D & Sanz-Valle, 2011). However, resources alone are not sufficient to explain innovativeness and identifying and bundling family based internal resources is key to leverage competitive advantage.

Firm innovativeness is defined as a firms tendency to engage in and support new ideas, novelty, experimentation and creative process (Lumpkin & Dess, 1996) that may result in new business models (firm innovativeness) (Braunerhielm & Thulin, 2023), launching new products (product innovativeness) or process innovativeness (Stahl, Zarco-Jasso & Miralles, 2023). Innovativeness and innovation have been conceptually distinguished by the authors identifying that the former encourages and stimulates the latter. Innovativeness implies that firms are open to new ideas (Nguyen et al, 2021; Ferreria et al, 2020; Mengue & Auh, 2006) that are subsequently developed into new products (Nagaraj et al, 2020; Zawawi et al, 2016) leading to competitive advantage.

The empirical evidence relating to firm innovativeness and firm performance by and large shows a positive relationship (Chege & Wang, 2020; Kijkasiwat & Phuensane,2020). Ability to compete better with others (Boisvert & Khan, 2022; Bayighomog Likoum et al, 2020), better access to financial capital (Breuer & Knetsch, 2022), and market growth (Bayighomog Likoum et al, 2020; Craig et al, 2014) has been linked with innovativeness. However, research studies that examined the relationship between firm innovativeness and family firm performance showed both positive (Parra-Requena et al, 2022; Bayighomog Likoum et al, 2020; Domi et al, 2019) as well as negative (Karabulut, 2015) results. Karabulut (2015) argues that innovation can negatively influence firm growth. The overlap between the family dynamic and the firm creates specific unique bundles of resources and capabilities including familiness(Daspit et al, 2019; Chrisman et al, 2005), social capital (Zahra, 2010; Arregle et al, 2007) and dynamic patterns of succession (Zybura et al, 2021; Nordqvist et al, 2013), governance (Dinh & Calabro, 2019) and control (Magistretti et al, 2020) that constitute a unique organizational setting. Empirical evidence relating to whether this organizational setting hinders or encourages innovativeness remains inconclusive (Heider et al, 2021). Small and Medium sized enterprises (SMEs) have shown active tendency to be innovative, particularly those who are engaged in exporting and despite mixed results in empirical research (Ismail & Aslam, 2019), a meta study by Rosenbusch, Brinckmann & Bausch (2011) posit the positive impact on firm innovation on performance in SMEs.

Family firms have often been criticized for preferring to pursue stability (Zellweger et al, 2013) and avoid taking risks (Fuad, Thakur & Sinha, 2021) all of which do not focus on the pursuit of innovation. Recent studies have deviated from this finding, arguing instead that family continuity is sustained through new product development by integrating industry expertise, traditional values and innovation (Rondi et al, 2019). Family businesses possess characteristics such as quick decision making (Kraus et al, 2020) and flexible structures (Tien, 2021) that non-family businesses may not always exhibit (Leppäaho, & Ritala, 2022). Long term focus typically encourages innovative actions (Matzler et al, 2015; Baltazar et al, 2023). Family businesses have a long term horizon (Zellweger, 2007; Ramadani et al, 2020; Kano et al, 2021) which is based on strategic actions that promote family continuity (Salvato & Corbetta, 2014; Nordqvist & Melin, 2010; Fang et al, 2021) and have greater incentive to use innovativeness to drive firm performance (Uhlaner et al, 2012; Feranita et al, 2017; Leppäaho & Ritala, 2022).

Firm performance is defined for the purposes of this study as the market position and financial position gained through innovativeness (Rubera & Kirca, 2012). Market position is operationalized through sales growth, market position and market share. Financial position is operationalized through Return on Assets, Return on Equity, Profit Margin to Sales ratio.
Based on the conceptual model (Figure 1) we propose the following hypothesis.

Hypothesis 1: Family Firm innovativeness has a positive impact on the firms performance.

3.2 Moderating role of Family Continuity

Family continuity was first conceptualized by Debicki et al (2016) as the importance that family members attach to family unity, establishing a family dynasty in the business and perpetuating family values through the operations of the business. Family continuity is defined as the preference to retain control through family member decision making in the business (Manchala,2020). Family continuity captures the Renewal dimension of the FIBER scale. The transmission of core family values from one generation to the next through propagating religious beliefs, values and moral principles is a crucial step towards achieving family continuity. Sharing family stories, key milestones and historical events creates a sense of identity and connection to past generations. The practice and preservation of traditions, customs can signify continuity as well as including conducting family meetings, involving family members in decision making.

Few empirical studies have analysed the influence of family dynamic on innovation management and further research is required in this domain (Casado -Belmonte et al, 2021; Diego – Soto et al, 2018; Hatak et al, 2016; Chrisman et al, 2015; Matzler et al, 2015; De Massis et al, 2013). Firm size (Yu & Lee, 2017; Rubera & Kirca, 2012), nature of industry such as high tech, low tech industry (Martínez-Noya & Garcia-Canal, 2021; Kijkasiwat & Phuensane,2020) and cultural factors including western or non-western country context (Azeem et al, 2021; Ghasemzadeh, 2019; Rubera & Kirca, 2012) significantly moderate the relationship between innovativeness and firm performance.

Although the interplay between family and the firm could lead to decisions relating to retaining control among family members (Moin, Guney & Kalak, 2020), the conversion of innovation inputs into suitable outputs is much more efficient in family businesses (Duran et al, 2016; Freixanet et al, 2021). Familiness could encourage greater innovative behaviours (Ingram et al, 2020; Jocic et al, 2023) and family managers can be seen utilizing resources for such efforts (Calabro et al, 2019; Erdogan et al, 2020). Family managers have been working with the firm since its inceptions and have a broad understanding of the resources, routines, processes (Chrisman, Chua & Zahra, 2003; DeMassis et al, 2018) and are familiar with the operational aspects of the business (Chrisman et al, 2016). Family businesses take risks (Tien et al, 2021) and innovate (Rondi, DeMassis & Kotlar, 2019) because the survival of the firm and sustainable competitive advantage is improved (Miller, Le-Breton Miller, 2005; De Massis et al, 2016; Tien et al, 2019).

When family members are concerned about preserving the family dynasty (Debicki et al, 2016; Hernández-Perlines et al, 2021) and pass on the firm to the next generation (Tien et al, 2019) they will want to engage in innovative activities to enable the business to expand and survive (Kosmidou, 2018; Rondi, De Massis & Kotlar, 2019). Family businesses do innovate and take risks and those that do, tend to achieve competitive advantage (Leppaaho & Ritala, 2022; De Massis et al, 2015; Khedhaouria, Gurau & Torres, 2015; Naldi et al, 2007; Miller & Le- Breton Miller, 2005). Family managers tend to display high levels of commitment (Razzak, 2022; Memli, Zellweger & Fang, 2013; Chrisman et al, 2012, Le Breton-Miller et al, 2011) as they have a long term vision (Calabro et al, 2019) and seek to ensure that the firm carries onto the next generation (Tien et al, 2019). Family members will work harder as they perceive superior firm performance to be directly linked to their well being (Houshmand & Schulz. 2016). Higher productive levels achieved through superior commitment levels by family members can have a contagious effect that could inspire non-family members as well (Pieper, 2010; Zahra et al, 2008). Weak ties have been associated with high levels of innovation (Grewal et al, 2020; Granovetter, 1973).

Hypothesis 2: Family Continuity moderates the relationship between Firm innovativeness and firm performance such that the effect of innovativeness on firm performance will be stronger when the level of family continuity is high

The reluctance to hire external managers due to the preference to retain control could result in lack of skills and resources to build innovative strategies and this could negatively affect new product development. Family members are influenced by socio emotional wealth endowments when making decisions related to the business and hence family member involvement might affect innovativeness negatively. The tendency to avoid conflict, avoid change, limited availability of financial resources and excessive reliance on family members could thwart innovativeness due to the socio emotional wealth preservation intentions.

Family members dislike new routines and processes as this may be seen as a threat to family control and may prefer to avoid change as this may bring about conflict. By allowing tried and tested operational procedures to remain intact family members are lessening the socio emotional wealth losses that accompany and change the firms status quo (Gomez-Mejia et al, 2011, Kosmidou, 2018). Experimentation and creativity are not greatly encouraged due to fear that it may conflict with existing family values and tried and tested methods are preferred as they do not challenge the existing status quo. The loss of control is a major deterrent for family businesses and this is the key reason for lack of innovativeness in a family business.

External funding is important to pursue innovations. However, family members are reluctant to pursue external funding as this may result in a change in the status quo and alter the power and authority vested in family members (Kosmidou, 2018). Professional expertise is required to support innovativeness and this may be seen as a threat by family members. Strong family ties leading to efficient governance (Granovetter, 1973) may inhibit the involvement of external professionals in the firm and deprive the firm of fresh ideas. Family members may possess skills and expertise which have been acquired by working with the business for many years. Yet fresh ideas usually enter the business through professionalization and the reluctance to encourage external expertise results in a lack of creativity and tend to be risk averse and invest less in R & D (Acosta-Prado et al, 2017) leading to declining innovativeness.

Hypothesis 3: Family Continuity moderates the relationship between Firm innovativeness and firm performance such that the effect of innovativeness on firm performance will be stronger when the level of family continuity is low.

4 Method

The sample frame is derived from the study population and consists of family businesses registered with the Export Development Board (EDB) of Sri Lanka (www.srilankabusiness.com) in the apparel sector. 234 apparel firms based in Sri Lanka are listed on the EDB website and this will be the sample frame.

This empirical study is based on cross sectional data from 132 family owned apparel exporting firms in Sri Lanka. The initial sample was drawn from Register maintained by the Export Development Board of Sri Lanka, the national body responsible for the promotion and development of exports.

Screening questions were used to identify whether the respondent firm was a family business. The unit of analysis was the family business. 598 questionnaires were distributed and 481 Responses were received in total and after initial screening 36 responses were discarded as they were not from family businesses. 7 questionnaires were rejected due to incomplete responses and another five questionnaires were rejected due to repeated answers. Finally, a sample of 415 responses were identified as the final sample that was used for data analysis using SPSS and AMOS software. Data was collected from owners, senior managers, middle managers, directors and partners with a response rate of 70.4%. Similar response rates were reported in the following studies carried out in Sri Lanka. Wickremasinghe (2016) in a study of gender on work related attitudes in lean apparel firms in Sri Lanka recorded a response rate of 62%, receiving 616 usable responses from operator level employees. Anonymity of the responses were assured as this improves response rates (Gray, 2004; Sekaran & Bougie, 2020; Azam et al, 2021). The core principles of ethical conduct were adhered to and participants were informed of the nature and content of the survey and consent was obtained prior. Simple Random sampling was used since bias can be eliminated and the sample error can be estimated. Statistical regularity is maintained as a random sample has similar attribute as the population. Due to these advantages, random sampling was selected as it is the best way to select a representative sample (Kothari, 2014). A pilot study was conducted using 40 responses and the results ($\alpha = 0.820$) were above the threshold value ($\alpha = 0.7$) and hence the research instrument was considered reliable and used for the main study.

4.1 Measures

To test the hypotheses a cross sectional survey based on multiple 5 point Likert scales ranging from Strongly Agree to Strongly Disagree was used. The Likert scale offered theoretically equal distances between the responses and was deemed suitable for this study.

Family continuity was operationalized using measures such as decision making, working together, sustain family dynasty and family values on an ordinal scale ranging from 1 to 5 proposed by Debicki (2016). A score closer to five denotes that family continuity is important to the firm.

Innovativeness was measured based on an ordinal scale ranging from 1 to 5. Seven items were used to measure firm innovativeness adopted by measures validated by Hurt, Joseph & Cook (1977) and by Popa, Acosta and Martinez-Conesa (2017). A score closer to 5 denotes strong levels of innovativeness. Innovativeness was operationalized using initiative to position firm and products, risk averse nature, inbound practices, commitment to R & D, technological innovation and leadership.

Firm performance was operationalized using eight items on the Five point Likert scale developed by Kellermanns et al (2012). Firm performance was operationalized using measures such as Profit, Total number employed, Total assets, comparison of performance, satisfaction with performance based on a scale proposed by Kellermanns et al (2012). It is not easy to obtain objective measures such as ROI, profit and total assets from the sampled firms and even if the data were obtained variations in accounting procedures could lead to bias and inaccuracies. Subjective measures show high convergence with objective measures of performance (Hatak et al, 2015) and hence subjective measures were used to capture performance. Financial and non-financial performance is captured through the following indicators. RoA, ROE and Profit margin on sales captures the financial performance while, growth in sales, market share, profitability, number of employees and ability to fund growth through profits captures the non-financial performance.

Table 1: Descriptive Statistics and Reliability Analysis

	Mean	*SD*	*Alpha*
Innovativeness	3.97	0.66	0.922
Family Continuity	3.93	0.73	0.956
Firm Performance	4.07	0.56	0.925

5 Data Analysis

The data was screened to assess whether multivariate assumptions have been met prior to performing multivariate analysis of the data. The general statistical properties of the data set such as outliers, linearity, homoscedasticity, multi collinearity, normality and common method bias were analysed and the data set was found to meet the general assumptions of multivariate analysis. Hair (2010, p.764) defines common method bias as 'covariance among measured variables is influenced by the data collection method that some or all of the responses are collected with the same type of scale'. Harman's (1967) cited in Podsakoff & Organ, 1986, p.536) single method test was conducted to identify the presence of common method variance and it was found to cease to exist. Mean centuring was used for the independent and moderator variable, since interpretation of results is easier (Dawson, 2014) and you can account for collinearity issues. Interaction method was used to analyse the impact of the moderator.

5.1 Moderation Analysis

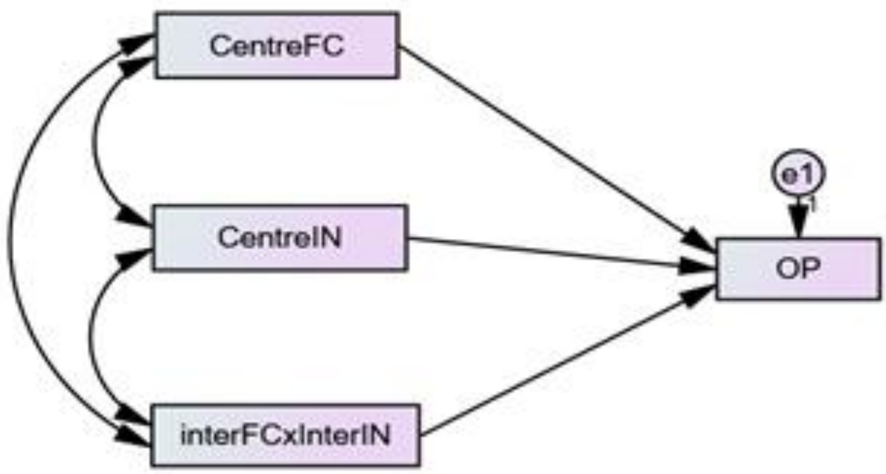
The study assessed the moderating role of Family Continuity (FC) on the relationship between Innovativeness (IN) and Firm Performance (OP). There is a direct and positive relationship between Innovativeness (IN) and Firm Performance (b= 0.366, t=11.319, p=0.000). The results revealed a negative and significant moderating role of Family Continuity on the relationship between Innovativeness and Firm Performance (b= -0.188, t= -6.798, p=0.000). The moderation analysis is presented in Table 2.

Table 2: Moderation Analysis Summary

Relationship	Beta	C.R	P – Value
IN ---→OP	0.366	11.319	0.000
FC---→OP	0.212	7.333	0.000
FC*IN--→ OP	-0.188	-6.798	0.000

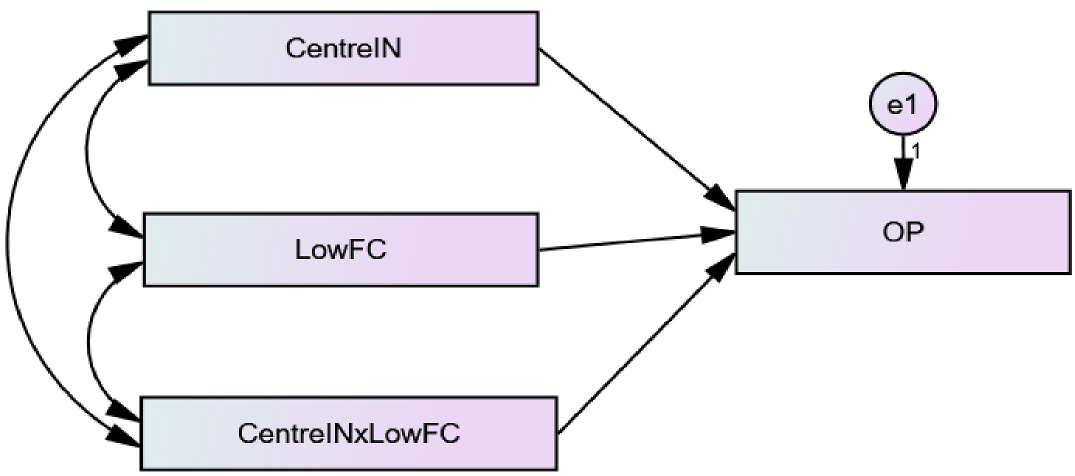
Results of simple slope analysis conducted to better understand the nature of the moderating effects are shown in Figure 5. Since the p value is significant, the presence of the moderator influences the relationship between the independent variable (IN) and dependent variable (OP). Since the beta value is negative, this indicates that the presence of the moderator weakens the relationship between the independent variable (IN) and dependent variable (OP). The slope analysis shown in Figure 5 shows that FC dampens the relationship between IN and OP.

Figure 2: Structural Model



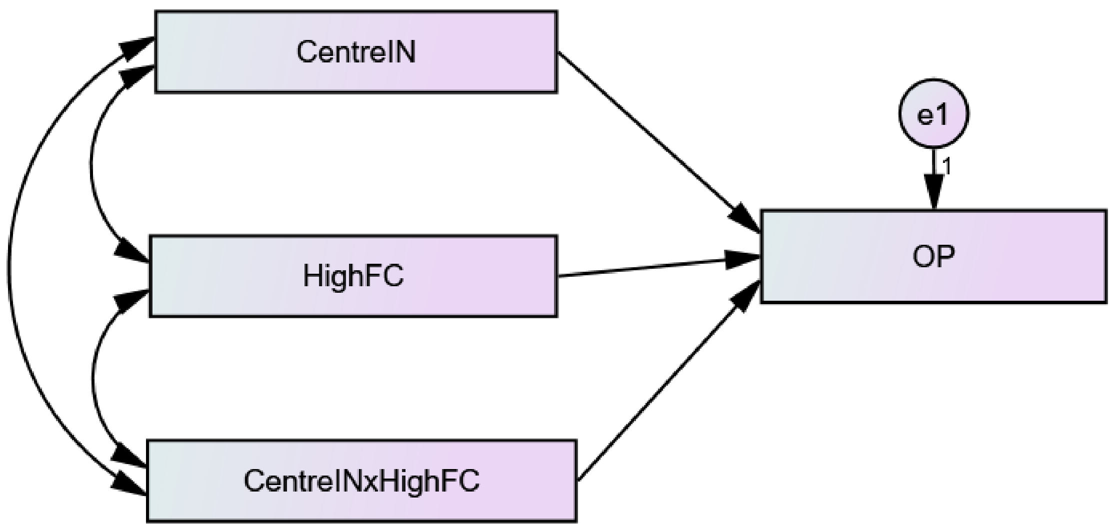
As can be seen in Figure 5, the line is much steeper for Low FC, this shows that at a low level of FC, the impact of IN on OP is much stronger in comparison to high FC. As shown in Figure 5, as the level of FC increased, the strength of the relationship between IN and OP decreased.

Figure 3: Structural Model for Low Moderator Level



In the presence of a low moderator (Low FC), the relationship between IN and OP has increased (Table 3) as the unstandardized regression weight has increased from 0.212 to 0.503 under the influence of Low FC (low moderator).

Figure 4: Structural Model for High Moderator Level



In the presence of a high moderator (High FC), (Table 4) the unstandardized regression weight remains almost identical from 0.212 to 0.229 (Table 4) and CR value has reduced under the influence of a high moderator (High FC) and therefore the relationship between IN and OP has decreased. A high FC dampens the relationship between IN and OP which is evident through slope analysis and analysis of the CR value and Beta value (Table 4). Although it is weakened, a positive relationship exists between innovation (IN) and Performance (Dependent variable).

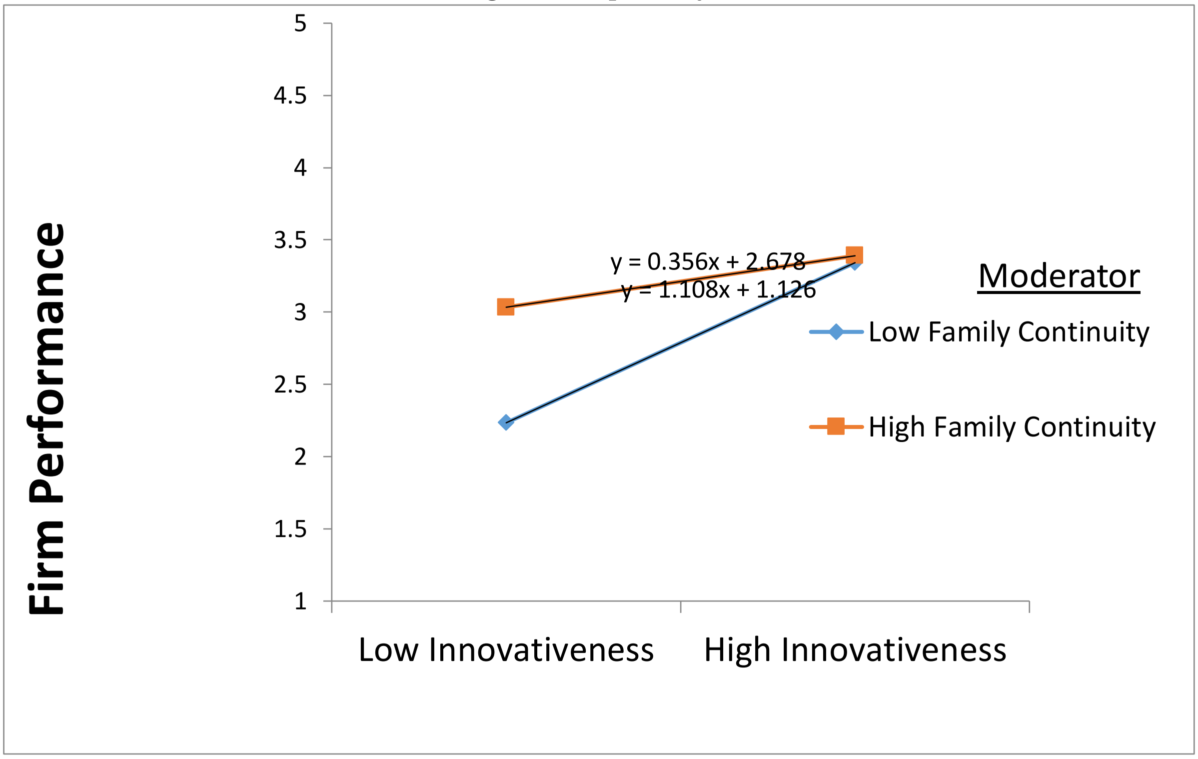
Table 3: Presence of Low Moderator

Relationship	Beta	C.R	P – Value
FC---→OP	0.503	15.743	0.000
CentreINxLowFC → OP	-0.188	-6.798	0.000

Table 4: Presence of High Moderator

Relationship	Beta	C.R	P – Value
FC---→OP	0.229	5.264	0.000
CentreINxHighFC → OP	-0.188	-6.798	0.000

Figure 5: Slope Analysis



The interaction of the moderator was probed, i.e. how the relationship between independent and dependent variable changes in different levels of the moderator. The influence of low and high levels of moderator (FC) on the independent and dependent variable was analysed. It was observed that the moderator (FC) is positive and significant at levels, i.e high, mean centered or low.

The moderator is significant at all levels of the tests.
High moderator Level: 0.229
Mean centred moderator Level: 0.212
Low moderator Level: 0.503
Therefore the moderator variable Family Continuity is moderating the relationship between innovation (IN) and Performance (Dependent variable) when the moderator is strong as well as weak.

5.2 Effect Size

F2 Size effect explains how much the moderator, Family Continuity (FC) contributes towards the endogenous construct, Organizational Performance (OP). Without inclusion of the moderator, R square value for Performance is 0.708. This shows that without the moderator, Innovation account for 70.8% change in the endogenous construct, Organizational Performance. With the inclusion of the moderator the R square value increased to 0.780. This shows an increase of 7.2% in variance in the dependent variable with the inclusion of the moderating effect.

$$F^2 = \frac{R^2_{Included} - R^2_{Excluded}}{1- R^2_{Included}}$$

$F^2 = 0.780\text{-}0.708/(1 - 0.780)$

$F^2 = 0.327$

Based on Kenny (2018) proposition that 0.005, 0.01 and 0.025 constitute small, medium and large effect sizes, in this analysis, Family Continuity has a large effect on the endogenous variable (Performance) and contributes in a very significant way to the endogenous construct, Performance. Therefore, there is a large negative moderation effect in the model as Family Continuity weakens the relationship between innovation and performance.

Further, slope analysis is presented to better understand the influence of the moderator. The figure below shows that the line/slope is much steeper for Low Family Continuity. This shows that when Family Continuity is low, the influence of innovation on performance is greater and significant compared to high family continuity' circumstances. At higher family continuity the line tends to straighten and this shows that a similar change in Innovation does not influence performance in the same way. In conclusion higher family continuity weakens the impact of innovation on Performance.

6 Conclusion

Previous empirical studies on innovation and performance in family businesses have adopted a comparative approach, exploring differences in levels of innovativeness (Matzler et al, 2014; Chrisman et al, 2014; Rondi et al, 2019, Ciotek et al, 2022; Shi et al, 2023; Zhang et al, 2023) and performance (Laforet et al, 2016; Wu et al, 2019; Ahmad et al, 2020; Symeonidou et al, 2021) in family and non-family businesses.

There is a direct and positive influence of firm innovativeness on performance and H1 is accepted supporting existing research findings by Domi et al (2019); Chege & Wang (2020); Kijkasiwat & Phuensane (2020); Bayighomog Likoum et al (2020) & Parra-Requena et al (2022). Greater family involvement also increases trust and sharing information between members, and this enables sharing of cutting edge technology related information in the beginning of the innovation process. Partners tend to spend more time and invest in resources when family member involvement is high since such firms have a long term orientation. Board members in firms with high family involvement tend to encourage exchanges with external parties and generally encourage innovation (Bendig et al, 2020).

Family Continuity moderates the relationship between Firm innovativeness and firm performance such that the effect of innovativeness on firm performance will be stronger when the level of family continuity is high. This hypothesis (H2) is rejected. This finding supports empirical research by De Massis (2015b) as low risk taking is associated with less innovativeness and family firms with greater family involvement tend to take less risks. Goal alignment among family members is not always a realistic assumption and greater family involvement could lead to goal incongruence and result in lower performance (Rondi, De Massis & Kotlar, 2019). Greater goal diversity to lead to breadth goals and high goal diversity could result in conflicts. Therefore, higher family involvement could lead to less innovative outputs and less performance. However, little risk taking can also lead to innovative behaviours (Rondi, De Massis & Kotlar, 2019).

There is a large negative moderation effect in the model as Family Continuity ($f2 = 0.327>0.025$) weakens the relationship between innovation and performance. Highly cohesive family units find it difficult to incorporate the heterogeneous opinions of family members leading to conformity and group think. Such behavioural tendencies have a significantly negative impact on innovativeness of family businesses (Zahra, 2012; Rondi et al, 2019) particularly if the tendency to be open to outside ideas and opinions is less and can hamper creativity and innovation. Low levels of family cohesion can also create conflict since maintaining cohesion can be difficult as the generations expand and spread out. Therefore, family involvement generally has a significant negative influence on innovativeness and performance.

H3 is accepted as when family continuity is low the influence of innovation on firm performance is greater. Family involvement leads to generally lesser investments in R & D (Chrisman & Patel, 2012; Bendig et al, 2020), particularly in the absence of a long term R & D strategy. The need to retain control will be in conflict with the uncontrollability and unpredictability of R & D investments. R &^D investments require sometimes external capital and a willingness to engage with external stakeholders is mostly lacking in family firms and this would also lead to generally lesser investments in R & D. Involvement of family members in decision making leads to lesser inventions since they seek to avoid financial and technological failures as these could harm the brand name and reputation (i.e. family continuity) of the firm. Family member involvement typically leads to less risky behaviours and will tend to avoid focusing on several R & D ventures and instead focus on the project with the best prospects (Bendig et al, 2020). R & D projects typically involve external stakeholders and the unwillingness to avail internal processes to external parties as a result is also likely to result with greater family involvement and lead to lesser investments in R & D. therefore, less family involvement should have a greater impact on R & D investments and more risky initiatives relating to innovation and lead to more inventions.

There is a large negative moderation effect in the model as Family Continuity weakens the relationship between innovation and performance. When Family Continuity is low, the influence of innovation on performance is greater and significant compared to high family continuity' circumstances. Higher family continuity weakens the impact of innovation on Performance.

7 Recommendations

The findings highlight the importance of the content in which innovation is embedded. Greater family involvement could have significant negative influences on innovativeness if goal congruity and openness to diverse ideas and external party involvement is lacking. Further an increasing level of family involvement tends to result in lesser degrees of investment in R & D. Hence, family businesses need to incorporate a clear innovation policy that foresees these pitfalls and takes concrete steps to overcome these, particularly for family businesses since family involvement lies at the centre of most business decisions.

Developing and sustaining an innovative capability requires a significant resource utilization and typically SMEs are affected by scarcity of resources (Ismail & Alam, 2019). However, their active role in export markets enabled them to acquire new knowledge and capabilities that enhance their innovativeness. Despite the scarcity of resources, SMEs can leverage innovativeness through building an entrepreneurial orientation which could enabled them to be internationally competitive (Anzules-Falcones & Novillo-Villegas, 2023; Ismail & Alam, 2019). The moderating role of EO on the innovativeness – performance relationship is an area that is worthy of empirical research in the future.

Businesses should take steps to reduce family involvement since there is an inverse relationship between family continuity and innovativeness. Professionalization of management and decision making processes within family businesses by establishing independent boards and professional managers can reduce nepotism and family conflict. In order to fully maximize the innovation outcomes, it is important that innovative processes are institutionalized through means of corporate governance so that too much family involvement does not stifle innovativeness. Consistency between innovation decisions and approaches should also be encouraged to maximise innovation potential and sync with family firm dynamics.

Succession planning has a critical impact on business performance. Adequate preparation of successors can lead to better firm performance and ensure business viability. By bringing in non executive managers, firm can alleviate skills shortages among family members and reduce the pressure on family members to take over the business and reduce the likelihood of mismanagement.

External networks will enhance opportunities for family businesses and fostering such relationships with customers, suppliers and stakeholders is vital to identify new business opportunities, overcome skill shortages as well as compete better.

Finally, it is important to identify the limitations of this study. The generalizability of the findings are limited by the focus on a single country setting since the values, beliefs and cultural norms influence organizational practices. The study is also confined to the apparel sector and applicability of the findings to other sectors is not easily generalizable due to differences in organizational practices. Therefore, future studies should use more heterogenous samples to validate the findings of this research study.

ORCHiD ID
Gayashini Nanayakkara https://orcid.org/0000-0001-5084-0639

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