Available online at www. jenams.com

Journal of Engineering and Management Studies

E-ISSN: 2978-0888

Vol. 2, No. 1, 017, 2026

Exploring Alliance Management Capabilities in Libyan Family Businesses: Antecedents, Impact, and the Role of Social Capital

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Received: 09/09/2025; Accepted: 25/11/2025; Published: 01/03/2026

ABSTRACT:

Strategic alliances can provide firms with competitive advantages by granting access to both tangible and intangible resources through inter-organisational learning. However, such collaborations are often complex and high-risk, with failure rates estimated at around 50%. In response, scholars have increasingly focused on understanding the development of specific capabilities necessary for forming and sustaining successful alliances—namely, alliance management capabilities (AMC). Despite this growing interest, empirical research on AMC within the context of family-owned businesses remains limited. Grounded in the resource-based view (RBV), this study proposes and empirically tests a relational model examining the role of AMC in enhancing alliance performance among Libyan family businesses. Specifically, it investigates the mediating role of AMC in the relationship between alliance experience, the culture of family businesses, and political instability, and their impact on alliance performance. A quantitative approach was adopted, and data were collected via a structured questionnaire from 302 Libyan family firms.

This study makes four primary contributions. First, drawing on the RBV, it identifies key antecedents that influence the effectiveness of AMC in the Libyan family business context. Second, it empirically demonstrates that alliance experience, family business culture, and political instability positively affect the development of AMC. Third, it contributes to the literature by examining the moderating effect of social capital on the relationship between AMC and alliance performance. Finally, the study empirically validates the AMC construct and its dimensions namely, alliance proactiveness, alliance coordination, and alliance learning—within the unique setting of Libyan family firms.

The findings reveal that AMC positively influences alliance performance and partially mediates the relationships between the antecedent variables and performance outcomes. Notably, the impact of AMC on alliance performance is found to be contingent upon the level of social capital, highlighting its moderating role in this dynamic.

Keywords: AMC, Alliance Performance, Qualitative approach, Family Business

1. Introduction

Over the past several years there has been a growing interest in the alliances as a strategic option for growth and gaining competitive advantages (Zineldin & Dodourova, 2005). Some researchers have defined alliance as the cooperation or association agreement between at least two independent companies that will manage one specific project, for which they will work together to improve their competencies during a specified period (Koen H Heimeriks & Duysters, 2007). As stated by Crossan and Apaydin (2010, p. 416), alliances now "shape complicated webs of relationships that form networks". According to Rothberg (1997), a strategic alliance is a co-partnership between more than two companies that unite to investigate a set of agreed upon aims. Furthermore, strategic alliance has also been defined as a voluntary agreement among enterprises involving sharing and exchange of services, or co-development of products and technologies (Gulati, 1998). In the light of the definitions offered below, it can be argued that the alliance is a simple form of collaboration among at least two partners, aiming to reach higher capabilities.

The RBV suggests that resources of the valuable company are usually scarce, imperfectly imitable, and lacking in direct substitutes (J. Barney, 1991; Bromiley & Rau, 2014). Because of this, the accumulation and trading of resources are strategically crucial to organisations. When it is possible to

exchange resources in the market efficiently, it is more likely that organisations will start new alliances (Eisenhardt & Schoonhoven, 1996). However, market transactions are the default state for the firm, for the spot market, it is often impossible to have efficient exchanges (Lavie, 2006). Additionally, it is not possible to trade some resources perfectly, as they either intertwine with other resources or are integrated into firms (Chi, 2015). Hence, acquisitions, strategic alliances and mergers are implemented. Thus, from the RBV perspective, strategic mergers/acquisitions and alliances are considered as strategies for obtaining resources from other organisations that could garner competitive advantages (H. Yang, Lin, & Lin, 2010). Thus, from the RBV perspective, strategic mergers/acquisitions and alliances are considered as strategies for obtaining resources from other organisations that could garner competitive advantages and values that would otherwise be unavailable to the organisation (H. Yang et al., 2010). When these resources cannot be efficiently achieved by acquisitions/mergers or market exchanges such as aggregate, exchange or share valuable resources with other companies. Combining these with others' resources leads to creating the most value out of existing resources, provided that such combination results in optimal returns (Koen H Heimeriks & Duysters, 2007; Karsmakers, Duysters, & Snijders, 2010; Lütjen, Tietze, & Nuske, 2014). On the whole, the goal of strategic alliances is that an organisation can extract the most value out of its existing resources by combining them with resources from outside the firm, providing that this combination present beneficial returns to the organisation.

1.1. Alliances challenges: The Emergence of AMC Concept

Alliances are a strategy for acquiring capabilities and resources from business partners to share risk and improve competitive advantage (Helfat & Martin, 2014). However, research has shown that alliance, in general, has a high failure rate, where many companies fail to get the hoped-for outcomes from their alliances (Lhuillery & Pfister, 2009; Lokshin, Hagedoorn, & Letterie, 2011; S. H. Park & Ungson, 2001). For example, Kaplan, Norton, and Rugelsjoen (2010) found that about Fifty percent of all alliances yield returns over the input of capital cost. Zineldin and Dodourova (2005) also documented that the failure rate of strategic alliances is projected to be as high as 50%. According to Kale et al. (2002), 40% of research alliances could be judged as having failed. Similarly, only 15% of the terminated Research and Development (R&D) alliances sampled in Reuer and Ragozzino (2006) were judged as effective, 34% being considered as failures, and 51% have experienced an average result in the form of contract withdrawal or expiration abreast through a partner. Ignorance and lack of experience are said to be a critical cause of alliance failure (Heimeriks, Koen, Duysters, & Geert, 2007).

As a result of this high failure rate, scholars have sought to increase the effectiveness of these alliances by developing the concept of AMC (Ha Hoang & Frank T Rothaermel, 2005; Karsmakers et al., 2010). AMC can be considered as cognitive, organisational or skills that can offer the basis to effectively manage every alliance (Jeffrey H Dyer & Singh, 1998; Schreiner, Kale, & Corsten, 2009). In this respect, Kale et al. (2002) claim that in order to assist the firms to learn from their alliance experiences and to share opportunities, the alliance management capabilities should be treated as a superior set of skills in enhancing their capabilities

However, the AMC is a difficult organisational capability because of the uncertainties and difficulties characteristic of managing projects across organisational boundaries. It is not surprising, consequently, that some alliances do not live up to expectations or even fail (Kogut & Zander, 1992; Rungsithong, Meyer, & Roath, 2017). So far, the AMC has been recommended because it allows a company to reconfigure, integrate, and build external and internal capabilities to address change of the environments because they generate innovative forms of competitive advantage (Helfat et al., 2009). Therefore AMC contributes to firm-level competitive advantage, consequent that it has become an important concern in strategic fields (W. Y. Wu, Shih, & Chan, 2009).

The approach of AMC draws upon the Resource-Based View notion of organisational capabilities and routines to clarify strategic alliance management (Niesten & Jolink, 2015; Wassmer, 2010). Accordingly, the capability to manage alliances successfully between firms is considered as a source of competitive advantage, which is referred to as AMC (Bharat N. Anand & Tarun Khanna, 2000; Ireland et al., 2002). Isoraite (2009) and Ditillo and Caglio (2011) argue that if the competence to administer alliances is heterogeneously distributed across companies and hard to imitate, then the AMC has the possibility to create the competitive advantage at the company level (Rungsithong, 2014).

1.1.1. *Definitions of AMC*

Although AMC is rooted in marketing and management disciplines, the literature on AMC has used several notions to reference this phenomenon. The terms AMC and alliance capability have naturally been used in the management strategy and publications by Kale and Singh (2007b), and Yongzhi Wang and Rajagopalan (2015b) whereas relational competence has been a matter of concern by Zambaldi, Mascarenhas, Bernardes, and Garcia Neto (2010), and Phan, Styles, and Patterson (2005). For example, the utilisation of relational capability has been mostly examined by (Kohtamäki, Rabetino, & Möller, 2018; C. Storey & Kocabasoglu-Hillmer, 2013). AMC is essentially constructed upon the RBV, which suggests that "inimitable rare, and valuable, assets reside in the companies" (J. Barney, 1991). It is defined as the ability of the companies to find, negotiate, coordinate, and terminate the alliance (Kale & Singh, 2009a; Lavie, 2007). Regarding the stages in the alliance life cycle, the components are "search partner, negotiation, coordination, bonding, communication, learning, and exiting".

Activities and processes enable the utilisation of capabilities and resources, frequently linking resources among departments or functions (Kraaijenbrink et al., 2010). Aligned with the resource-based view, J. Barney (1991) states that AMC consist of competencies and processes, which

bundle together with other capabilities and related competencies and processes, to achieve VRIN/O "valuable, rare, inimitable, non-substitutable, and structured" assets, consequently classifying competitive advantage (Kraaijenbrink et al., 2010).

Kale and Singh (2007b) consider AMC as a higher-order dynamic capability that is in alliances might facilitate the reconfiguration of resources. Consequently, "dynamic capabilities might be disaggregated to the capacity (1) to keep effectiveness through combining, enhancing, protecting, and, when essential, reconfiguring the business enterprise's intangible and tangible resources (2), to seize opportunities, and (3) to sense and form threats and opportunities," (David J Teece, 2007, p. 1319). Some studies consider AMC as "higher-order resources that influence the lower-order alliance level resources" (Niesten & Jolink, 2015). Thus, the dynamic capability can assist reconfigure, seize and sense, as a base of firm's resource (David J Teece, Pisano, & Shuen, 1999). In summary, AMC might serve companies in two ways. First, in order to maintain competitiveness, it allows a continuous alliance with management, alliance partners, and learning from the alliance relations, and integration. Secondly, AMC functions as a dynamic capability with an emphasis on exploration, as an operational or strategic capability enabling exploitation (Kale & Singh, 2007b; Kohtamäki et al., 2018; Yongzhi Wang & Rajagopalan, 2015b).

The AMC is the ability to choose partners, involvement knowledge through alliances, and coordinating to minimise costs and maximise overall benefit to the companies. In other words, AMC consists of alliance transformation, inter-organisational learning, and inter-organisational alliance portfolio coordination (Easterby-Smith & Lyles, 2011; Schilke & Goerzen, 2010). AMC is defined as the process that covers mainly the different organisational routines of building and coordinating alliances during their whole life cycle (Kupke and Lattemann (2008). On the other hand, alliance management capabilities as a multidimensional structure based on three skills coordination, bonding, and communication, to manage the stage of post-formation alliances (Schreiner et al., 2009).

The term 'communication' relates to the likelihood of sharing accurate knowledge and bonding indicating the capability of companies to increase strong personal relationships among persons joining in the alliance management capabilities. Coordination, on the other hand, refers to the ability to manage and coordinate interdependence between partners. Learning is related to activities which Lieberman and Peralta (1989) involve transferring knowledge across the boundaries of organisations within an alliance (Kang, Hur, & Kim, 2014b). As stated earlier, Kandemir, Yaprak, and Cavusgil (2006) coordination, learning, and scanning are capabilities as a firm's higher order capability created regard AMC. For the list of definitions of AMC from the previous studies see Table 1 below.

According to the previous studies, the AMC can be defined as firm's ability, which is composed of managerial decisions of business level within processes and routines to monitor and manage alliances at the alliance's portfolio. AMC also includes the competencies of seizing and sensing, learning, and coordination (Kale et al., 2002; Niesten & Jolink, 2015; Schilke & Goerzen, 2010; Schreiner et al., 2009; Sluyts et al., 2011).

Table 1 Definitions of AMC (Jifri, 2016; Kohtamäki, Rabetino, & Möller, 2017)

Article	Definition
Khanna (1998, p. 351)	Alliance capability as "a firm's ability to identify partners, initiate alliances, and engage in the ongoing management and possible restructuring and termination of these alliances."
Kale et al. (2002)	"Alliance capability would rest upon how effectively the firm is able to capture, share, and disseminate the alliance management knowhow associated with the prior experience".
Draulans and Volberda (2003, p. 152)	"The ability to create successful alliances, based on learning approximately alliance management and leveraging alliance knowledge inside the company." (p. 152, see also p. 153)
Hoffmann (2005)	"Alliance capability on the portfolio level constitutes the ability to develop the alliance portfolio strategy, establish an alliance management system, and coordinate and monitor the portfolio".
Rothaermel and Deeds (2006)	A firm's ability to effectively manage multiple alliances
Koen H Heimeriks, Duysters, and Vanhaverbeke (2007)	"The degree to which firms are able to use mechanisms to integrate alliance related knowledge, which enables them to create routines for managing alliances."
Heimeriks et al. (2007)	"Alliance capability is defined as a higher-order resource, which is difficult to obtain or imitate and has the potential to enhance the performance of the firm's alliance portfolio".
Schreiner et al. (2009)	"The constituent skills that are relevant to managing an alliance during the post-formation phase" (p. 1411)
Schilke and Goerzen (2010)	Alliance management capability can consider a "type of dynamic capability with the capacity to purposefully create, extend, or modify the firm's resource base, augmented to include the resources of its alliance partners."

1.1.2. *Dimensions of AMC*

This part offers the main routines that include the alliance management capabilities. The routines are used to represent sub-components of alliance management capabilities as representative dimensions. The previous literature conceptualised the alliance management capabilities by building on the different basic types of routines, such as

alliance coordination, alliance transformation, alliance learning, alliance proactiveness, alliance communication, and alliance bonding. The most critical challenges in a given inter-firms alliance are the uncertainties associated with the motivation of collaboration (S. H. Chan, Kensinger, Keown, & Martin, 1997; Tushar Kanti Das & Bing-Sheng Teng, 2000; Khanna, Gulati, & Nohria, 1998b). Moreover, of importance is the management of task interdependence among them (Borys & Jemison, 1989; Gulati & Singh, 1998; Schreiner et al., 2009). They are sometimes mentioned to as 'cooperation problems...' and... 'Problems of coordination' (Gulati, Lawrence, and Puranam (2005) or as 'risk of performance and risk of relational'(Tushar Kanti Das & Teng, 2001). Through choosing suitable partners, these challenges can be addressed at the stage of alliance formation as recommended by earlier studies (Emden, Calantone, and Droge (2006), or through negotiating a suitable contract (Argyres & Mayer, 2007; Reuer & Arino, 2007). Undoubtedly that some of the ways to address the relationship between partners is the appropriately forming and designing the alliance. Managers of the alliance need to have suitable interaction processes to be able to the alliance in the stage of post-formation, for the reason that the problems of collaboration cannot be fully resolved at the start of the alliance but persist throughout the entire relationship (Rajesh Kumar & Nti, 1998; Schreiner et al., 2009). In the stage of post-formation, a well-conceived structure of the alliance an agreement delivers a possible frame for generating benefits. Thus, in conceptualising AMC, this research builds on earlier studies that efforts on implementation skills to address the key dimensions related to managing an alliance.

1.1.2.1. Alliance Proactiveness

By 'alliance proactiveness' one mentions to a company's "efforts to identify potentially valuable partnering opportunities" (Sarkar, Echambadi, & Harrison, 2001, p. 702). This is because an alliance proactiveness sensing routine allows firms to classify new opportunities to gain resources and market requirements (Schilke & Goerzen, 2010). By taking pre-emptive action and scanning the environment, firms are seizing new opportunities (Lumpkin & Dess, 1996); enabling firms to adapt to changing conditions and gain potential partnering opportunities (Jenkins (2009), to reconfigure assets and senses the environment to seize opportunities (David J Teece (2007), and as resources become available, to gain a competitive advantage (Hite & Hesterly, 2001). For the alliance context, one of the alliance proactiveness concepts is organisational sensing routines (Sarkar, Echambadi, & Harrison, 2001; Schilke & Goerzen, 2010). High alertness environmental information is reflected by sensing routines (Leischnig, Geigenmueller, & Lohmann, 2014). For gaining resources, sensing routines enable the organisation to enjoy new opportunities, to identify market requirements and understand the environment. Thus, there is the motivation to adopt that sensing routines serve a significant part of AMC. By the opportunities, one refers to the identification to enter into strategic alliances sensing routines, considered chiefly the critical for alliance performance (S. H. Park, Chen, & Gallagher, 2002; Schilke & Goerzen, 2010). It is important also to identify suitable alliance partners that have the competencies and resources which the firm needs (Zahra & George, 2002). Companies that are capable of sensing opportunities of alliance tend to enjoy initial first-mover advantages on the market to find partners, and that might translate into higher alliance performance (Schilke & Goerzen, 2010). Karol, Loeser, and Tait (2002), for example, find that higher performance might ascribe to routine procedures of evaluating and identifying partners. A large literature stream has highlighted the significance of certain elements, such as trust as being of significance stage of partner selection criteria (Kale et al. (2000a), the financial payoff (William G Dyer and Dyer (2013), complementarity (M. Harrison (1997), and commitment (T. Das and Kumar (2009) when choosing an alliance partner. The alliance failure might happen through a misfit in any of these characteristics (Bucklin & Sengupta, 1993; Chatterjee, 2004). Moreover, alliance scanning enables accessing and finding inter-organisational alliance opportunities in the first place (Gulati, 1999). Alliance scanning of partnering opportunities might let the partners' identification with strategic compatibility, complementary knowledge, and resources such as skills to integrate the capabilities of partners in the company's routines (Kandemir et al., 2006).

1.1.2.2. Alliance Transformation

In response to the changing the environment, the alliance transformation is reflected in the partner's ability to adopt the process of knowledge transfer (Leischnig et al., 2014; Zollo et al., 2002). While alliances between firms, might seek to seamless interaction and perfect fit, such outcomes rarely show from the beginning. Modifications (e.g., changes in alliance-related governance mechanism and contract amendments) can finally lead to an effective alliance (Zollo et al., 2002). Although some preceding studies have interpreted organisational changes in alliances such as a sign of failure, these changes are now considered to be a normal phenomenon; changed conditions of the market are supposed to make the restructuring of alliances needed (Schilke & Goerzen, 2010; Zollo et al., 2002). Accordingly, the expectation that a perfect fit among partners can be recognised from the starting is proven to be unrealistic. Rather, to establish such a fit, the adaptation and interaction among partners are essential (Doz & Hamel, 1998). Furthermore, one of its largest advantages of the organisational form of alliance is the flexibility that transformations in all strategic alliances are about 40% (Zollo et al. (2002); examples of which are changes in the alliance-related governance mechanisms, fluctuations in alliance-related personnel or contract modifications. In order to deal with shared principles that should be adhered, it is frequently hard, if not impossible, to routinise change beyond recognizing it (David J Teece, 2012).

1.1.2.3. Alliance Coordination

Alliance coordination describes the routines to coordinate resources and activities with partners (Gulati et al. (2005). It aims to "identify and build consensus about task requirements in a given alliance, the nature of the associated interdependence between partners, and the specification of working procedures for task execution." (Schreiner et al.

(2009, p. 1401). Leischnig et al. (2014, p. 1051) are of the view that "alliance coordination ensures efficient alliance governance and greater transaction legitimacy among partners". Alliance coordination related to the governance of alliance management deals and individual alliances, with the development of all of the strategic alliances of organisation (Goerzen, 2007). The legitimacy of the transaction among the firms and single alliance governed efficiently, and are ensured by alliance coordination (Rajesh Kumar & Nti, 1998). Three opinions support the need for alliance coordination routines; (i), in the alliance cooperation context, the presence of dependencies among partners lead to needing for coordination, by alliance coordination, resources dispersed over different individuals in organisations need to be harmonized; (ii) the firms need to reconcile the interests of all parties, due to the partners rarely pursue a common the objective of alliance autonomously, and this will be through coordination mechanisms (Todeva and Knoke (2005). (iii) the need for alliance coordination to achieve alliance objectives because alliance partners also do not automatically have all of the essential information to bring into line their counterparts with the activities of their actions (Schilke & Goerzen, 2010). Accordingly, alliance coordination is a significant task of AMC (Goerzen & Beamish, 2005). The alliance coordination routines consist of the practices directing the company's sequential activities timely information, and the capacity to search for adaptation to achieve the objective of the alliance (Gulati, Wohlgezogen, & Zhelyazkov, 2012a; Zollo & Singh, 2004a). Accordingly, complex tasks are accomplished by mutual adaptation between the partners (Dekker, 2004).

1.1.2.4. Alliance Learning

The likelihood of alliance learning that is transferring knowledge through organisational boundaries is considered to be the main benefit of strategic alliances (Todeva & Knoke, 2005). At the same time, the ability to successfully transfer the knowledge from the partner plays an essential role in the success (Sampson, 2007). Firms frequently vary in their routines for learning from their partner (Koen H Heimeriks & Duysters, 2007). under the strategic alliances, the alliance learning has a positive effect on the resources gained and when companies interact by the strategic alliances, they might learn more than others (Muthusamy & White, 2005).

A number of authors tend to be lenient towards the absorptive capacity theory when defining the alliance learning concept (Lane & Lubatkin, 1998). Absorptive capacity can be defined as to a capability of companies to identify external knowledge, apply to the business of firms and to assimilate it (Lane, Koka, & Pathak, 2006). As stated by Lane and Lubatkin (1998), the steps involved in the process of alliance learning are captured by the absorptive capacity. Inversely some researchers observed inter-organisational learning and absorptive capacity as two different concepts where former is referred to the capability to utilise and acquire internal also external knowledge and the latter related to development in learning activities (Buongiorno et al., 2009). However, such contradictory views are primarily due to common conceptual affinity, the interchangeable use of organisational learning and absorptive capacity and organisational learning (Sun & Anderson, 2010). Organisational learning defined by Fiol and Lyles (1985, p. 80) as "the process of improving actions through better knowledge and understanding". The significance of applying and acquiring new knowledge to developed firms' actions are within the definition of organisational learning. This overlap recommends that notions, inter-organisational learning, and absorptive capacity be mutually interlinked.

1.2. Family Bbusiness

The family business is dissimilar from a firms with no family ownership or participation because of the influence that the family can have on business (Astrachan, 2010; Kellermanns, Eddleston, Sarathy, & Murphy, 2012). Significantly, in the family business, family transmitted implicit knowledge is acknowledged as a latent advantage of the strategic (Craig, Dibrell, & Garrett, 2014). In this way, the effect the family brings about to the uniqueness of the company is located at a pivotal intangible and hard to imitate resource (Othman, 2014). Therefore, the effect of the family enables a distinctiveness that, if leveraged, can add to building competencies that positively impact the functioning of both the business and the family (Frank, Lueger, Nosé, & Suchy, 2010; Pearson, Carr, & Shaw, 2008); (Craig et al., 2014). The influence of family help reinforces and shape a set of culture-rooted beliefs that drive values and aims and how diverse business, and family might offer sustainable competitive advantages (Schuman, Stutz, & Ward, 2010; Sorenson, Goodpaster, Hedberg, & Yu, 2009b).

As proposed by Astrachan, Klein, and Smyrnios (2002) for measuring the level of the influence of family in a family firm the three-dimensional method influence on power, experience, and culture (FPEC). The operational definition of the FPEC scale takes into account numerous aspects of family influences and views as a whole rather than separated non-overlapping issues (Debicki, 2012). Size of the firm is one of those determinants of family firms (Litz, 1995). For instance, while Daily and Dollinger (1993) expected the family firms to be as SMEs, Litz (1995) listed several firms that are more or less of the world's biggest and yet controlled by the family. Family firms also defined as a one in which a single family leads the business and controls the ownership (Braun & Latham, 2009). Family business also defined by Romano, Tanewski, and Smyrnios (2001) as a company where a family maintains members of the family occupy control and at least 50 per cent ownership and significant positions of management. For definitions of the family business list from the previous studies, see table 2 below.

Family business categorised by Kreiser, Ojala, Lamberg, and Melander (2006) to two primary attributes: (i) it is controlled by a group of families or a family; and (ii) they wish to maintain control. Family firms as a business are managed with the intention to pursue and form the vision of the business held by the small number of families in a manner that is possibly supportable across the family generations (Chrisman, Chua, & Sharma, 2005).

Table 2 Definition of family businesses (Alwafi, 2013, p. 11)

Reference	Definition
(P. Davis, 1983, p. 47)	"Those whose policy and directions are subject to significant influence by one or more family units. This influence is exercised through ownership and sometimes through the participation of family members in management."
(J. Davis & Tagiuri, 1985)	"Organisation where two or more extended family members influence the direction of the business."
(P. Davis, 1983, p. 226)	"Are economic enterprises that happen to be controlled by one or more families" (that have) "a degree of influence in organisational governance sufficient to substantially influence or compel actions."
(Handler, 1989)	"An organisation whose major operating decisions and plans for leadership succession are influenced by family members serving in a management or on the board."
(Holland & Oliver, 1992)	"Any business in which decisions regarding its ownership or management are influenced by a relationship with a family or families."
(Pratt and Davis, 1986, pp.2, Ch. 3)	"one in which two or more extended family members influence the direction of the business through the exercise of kinship ties, management roles, or ownership rights."

1.2.1. *Family Business Culture*

The proposition that underlies the organisation is included the culture of the organisation, many of which are "deeply embedded to be unconscious, hidden, and taken for granted" (Barbera, 2014, p. 216). It is a source of competitive advantage "as a set of shared norms and values held by employees, which guide their interactions with clients, peers, and management" (Craig et al., 2014). In the context of the family business, culture is introduced as "a personal support and belief of the business's aims and visions, a willingness to add to the administration, and a desire for a link with the organisation" (Astrachan et al., 2002, p. 51). According to (Fletcher, Melin, & Gimeno, 2012) the culture of the family business is a significant family firms endowment that determines how values and assumptions shared by the systems of business and family. The culture of the family business is in which higher level motivates the key personnel, and family members need to work for the collective good (Craig et al., 2014).

By the influence of the family, the foundation for the culture of the family business is provided. Arregle et al. (2007) argued that what the family wants to achieve and how it wants to achieve it through the family influence mission. According to (Verbeke & Kano, 2012), in so doing, that limit what it is that the family needs and the family mission establish heuristics and biases. For instance, (Cruz, Hamilton, decisions assistances to limiting perhaps risky opportunities, define what opportunities are acceptable, or moving the family business away from opportunities that are potentially scandalous or pushing the family business to be more proactive. In addition, the family influence help defines what activities within the family business are acceptable due to the influence top management too (Athanassiou, Crittenden, Kelly, & Marquez, 2002; Othman, 2014). The family influence also shapes what outcomes are highest significant. For instance, profit growth or stable employment or vice versa, the family might favour. Given the influence of the family and its unique mission, In the key decisions of a family business, the family can impose some of its core values, in these decisions, as well as, determine which is socially acceptable, consequently, the effect of family moulds the culture of family business across generations (Miller & Le Breton-Miller, 2005).

1.2.2. *Family Business in Arabic Countries*

Many studies have discussed the impact of culture on the delicate process of management practices (Glaister et al., 2009). Such studies have confirmed differentiations in management practices between the UK, Japanese, and American firms (Child, Faulkner, & Pitkethly, 2000). There is no culture-free theory of management as an agreement between management scholars (Ali, 1995). Each country has something named management, however its meaning might differ considerablyG. Hofstede (1993). These differentiations & Jack, 2012) state that the influence of family over strategic

Culture is defined by Hofstede, the culture as the collective programming of the mind that differentiate the category of people (a nation, for instance) or one group, from another. He further argued that culture at the organisational level is superficial and acquired at a later stage, and diverse from the culture at the national level because of its fundamentally acquired at childhood.

The employees and managers of the family businesses in the Arab countries (of which Libya is part of) act in ways alike to those in developed countries, yet, there are disagreements, primarily linked to characteristics of the cultural (Welsh & Raven, 2006). Ownership of family business tends to vary between Western countries and developing countries, as in the former family businesses are not 100% owned by the family while in the latter most of the family firms are fully owned by the family (Alwafi, 2013). In several aspects the cultures in the Arab countries are distinctive (Welsh & Raven, 2006). The family firms in the Arab countries are there to enhance the family‘s social standing rather than being as a wealth-generating, and market- driven activity (AlFahim, 2011). In the aspects of cultural, for example as argued by Ali (1995), there are several factors that appear to be important in affecting management in the Arab countries such as: (i) family and tribal traditions, (ii) rising current contact with developed nations, (iii) Islamic influence,
(iv) the legacy of colonial bureaucracies and Ottoman Empire, and (v) political constraints and government intervention.

1.2.3. *Alliances in Family Business*

According to Molly, Laveren, and Deloof (2010), the managerial succession in family business firms depends on similarly negative results. The reason for the poor post-succession performance of micro firms concerns ill-prepared family management and interfamily conflicts (Sharma, Chrisman, & Chua, 2003). Also, lack of interaction and infrequent diversity among non-family and family employees as well could be difficult for the family business (Eddleston & Kellermanns, 2007). J. V. Hofmann (2009). It can also be argued that even when family businesses employ a large number of professional managers, instead of focusing on technical or professional capabilities, strategic decision-making might be limited to a narrow circle of insiders selected on particularistic standards. Family insularity and their failure to trust or value others could also impede knowledge sharing with non-family chief executives (Miller, Wright, Breton-Miller, & Scholes, 2015).

Frequently, when senior executives in family businesses grow older, they tend to reduce their eagerness to implement or change modern techniques, due to raising the level of risk aversion (Ogbonna & Harris, 2005). Due to the rapid change in a typical high growth industry, family businesses in this area need to continuously update to stay competitive as business partners (Gassmann & Keupp, 2007). Strategic alliances between family SMEs and large firms can take several forms, for example, locating the family SME's ability to proximity with a buyer's ability to allow just-in-time delivery of raw material, inputs and components; cooperating on product design and R&D to structure organisational capabilities and competencies; cooperating on supply chain activities to manage costs and enhance effectiveness of operations, or through delivering subcontracted human resource activities (Chaharbaghi et al., 2005; Doz & Hamel, 1998). According to Sardenberg (2013) family firms are likely to be less active in global markets and are more internally directed. Additionally, their strategic behaviour is likely to be somewhat conservative. According to Fernández and Nieto (2005), the international nature of a family's advantages and experience and their ability to take characteristics of them were key factors that had an impact on the extent of internationalisation. The family's long-term vision of the family and the presence of the managers of non- family noticeable out family firms with a propensity to internationalise Westhead and Cowling (1997). Donckels and Fröhlich (1991) as well as propose that the family firms participate less in cooperative activities and social and economic networks with other firms. BarNir and Smith (2002) examined the social networks role on between SMEs alliances with their results being supportive of the view that the networking properties of the senior executives of SMEs are positively related to the number of between companies alliances that their companies have entered into (Díaz, Rietdorf, & Dornberger, 2010; F. Zhao, 2014). The family SMEs depend on interpersonal relationships to build and sustain the strategic alliances through both social constraints and trust. Studies have stated that the family SMEs rather than formal control to exclude opportunistic behaviour (Chaharbaghi et al., 2005).

1.2.4. *Business Environment in Libya*

Between 1969 and 2011, President Muammar Gaddafi as a Jamahiriya ruled Libya. In 2011, the Arab Spring protests escalated into a full- scale conflict and eventually led to the overthrow of the government (Darendeli & Hill, 2016). The first free elections took place in 2012, giving way to a wave of optimism and hope. However, events developed in a negative direction. In 2014, violence erupted again, and the country gradually sank into civil war (OECD, 2016a). A weak legal framework, domestic insecurity, and political uncertainty, the Libyan business environment continued to suffer from them (Khodr & Ruble, 2013). Violence between rival armed militias, the civil war in Libya in 2011 and high crime rates over the period 2012-2014 meant that running a business in the country was severely constraints under such uncertainty and conflicts (Mansour, 2015).

Before the civil war in Libya, concrete efforts were made to restore the confidence of foreign and domestic investors in the Libyan market. Family SMEs in Libya received their highest level of attention from the government and institutional centres (Hosen, Hui, Suliman, & Rahman, 2011). As a direct result of this attention, the government established new open market policies and privatisations. This resulted in the transition to newly needed economic policies, regulations and support. In order to enhance and regulate the private sector activities in the country, the government passed Act Number 9 of 1992 (Masoud, 2016). The government also established Act Number 5 of 1997 to improve the private sector by encouraging foreign investments in the Libyan market (Buferna, Bangassa, & Hodgkinson, 2005). Libyan Prime Minister in 2010, issued the so-called the Trading Activity Law No. 23 to provide fiscal incentives regarding foreign domestic investment; followed by Law No. 9 regarding investment promotion, and investors in particular sectors (Mansour, 2015). Additionally a resolution was passed to establish the "Investment Authority and Privatisation Agency No.23 (2009), to be known as the Privatisation and Investment Board (PIB), for regulating FDI activities in the industrial sector" (Elmahjub, 2016; OECD, 2014).

In the Libyan market, the business systems are noticeably diverse from those established in the markets in developed countries (G. Hofstede & McCrae, 2004). One of the main differences is that the Libyan economic system is mostly based on the market but based on relations. The personal connectedness of business relations between local traders and companies (based on friendship and kinship) reflect close relations among traders/individuals; often the examples consist of regional loyalties, strong extended families, and tribal bonds (Enderwick, 2012). Consequently, loyalty goes beyond most the rules of business and social and regulations; this often happens in a collective culture such as Libyan society (Enderwick, 2012; G. Hofstede & McCrae, 2004). On 31/07/2009 in an interview with the U.S and Foreign Commercial Services' senior commercial officer in Tripoli, Libya, declared, "Business in Libya is all about relationships deals happen on the strength of personal contacts" (NFTC, 2009, p. 11).

1.2.5. *Private Firms in Libya*

1,830.000 Libyan workers in various sectors are estimated to be involved in the Libyan labour market (Younes (2013). Nearly 700,000 employees work in the public sector, with about 17% being engaged in agriculture and the rest work in the Libyan family businesses in various sectors. Of family businesses, nearly 54% work in the service sectors and 29% in the industrial sector, including manufacturing, mining, and construction (Abdulla, 2010). International relationships and evolving alliance with local and foreign companies will offer growth opportunities to improve labour skills in Libyan family business and will growth the Libyan nationals' participation in the labour market. Since 2010, the government has been able to reduce the number of public sector employees, paving the way for opening the industrial sectors to investors, and by encouraging them to work in family businesses in Libya (Abdulla, 2010).

In order to ensure employment for Libyan national citizens, some authors have defined labialisation as a positive part-driven employment policy and strategy (Abdulla, 2010; Agnaia, 1997). Witkins (2001) has identified that "it is a policy that aims to reduction the nation's dependence on effort of international and rise the involvement of local workers in the labour market". In this regard, the Libyan government is supporting and encouraging family business to collaborate with local and foreign firms, to reach the highest levels of general growth with more significant access to global markets, and in the hope of raising living standards (Blanchard, 2010). The Libyan government have taken steps in order to enhance the investment in the private sector, which will help create more occupations an also to increase minimum wages, safety standards of labours, Hartungi (2006), In order to reduce the official unemployment rate, which is running in excess of 30% Khodr and Ruble (2013) and Yearbook (2009), and to create labour safety standards, more jobs and to increase minimum wages, and to promote investment in the private sector, steps have been taken by the Libyan government (Hartungi, 2006; Younes, 2013).

1.3. Alliance Eexperience and AMC

Various theories have been utilised to comprehend the role of experience as an antecedent to AMC (Kale et al., 2000b; Rungsithong, 2014). Specifically, according to RBV, prior alliances' experience can generate AMC that allows firms to shape new alliances (Campo, Pardo, & Perlines, 2014; Gulati et al., 2009), thereby creating higher relational rents (Bharat N. Anand & Tarun Khanna, 2000; Jeffrey H Dyer & Singh, 1998). Applying this theory, different scholars have researched level of experience and learning, as accomplished in AMC (Cho & Arthurs, 2018; Kale, Dyer, & Singh, 2001; Schilke & Goerzen, 2010).

Alliance experience can be defined as the number of alliances the companies have been involved in through a period (Sluyts, Martens, & Matthyssens, 2010b). Lack of experience is contributing to alliance failure, as coordination and communication between partner become more difficult (S. H. Park & Ungson, 2001). Furthermore, as firms with lack of experience, tend to be unable to afford to solve a particular problem between partner regarding alliance (Koen H Heimeriks & Duysters, 2007). "Gaining experience allows companies to become additional competent at organisation specific processes than a smaller amount experienced companies" (Tushar K Das & Teng, 2002). As firms grow in experience, they enhance their abilities to solve problems and create natural, standardised solutions (Bereiter & Scardamalia, 1993; T. K. Das & Kumar, 2011; Koka & Prescott, 2002). As companies gain experience, company's managers of alliances learn to identify those unique kinds of knowledge that can be simply transferred to, and efficiently used in, another context (Kavusan, Noorderhaven, & Duysters, 2016).

In relation to the direct and indirect relationship among alliance experience and alliance performance, several studies have conducted interesting research outputs but with mixed results. Shan, Walker, and Kogut (1994) have highlighted a strictly positive relationship between alliance experience and performance. Experience appears to play a major role in joint venturing, particularly in Research and development joint ventures, where companies with additional experience are found to make additional value than companies without (Bharat N. Anand & Tarun Khanna, 2000). On the other hand, Rothaermel and Deeds (2006) and Draulans and Volberda (2003) have reported that the alliance-outcome do not increase continuously by the increase of the in alliance experience.

1.4. The Role of Family Business Culture

The previous literature was noting that a common culture characterises the firms, observable elements, for example, stories, vocabulary, and myths (Awadh & Alyahya, 2013; Luvison & de Man, 2015). Moreover, these unique practices and tendencies have positioned them to best deal with their market environments (Martins & Naidoo, 2014). Cultures develop over a number of specific effects, for example, the values of founders, although more importantly through the shared accumulated experience of all member (Luvison and de Man (2015). Organisational culture embraces ideas and behaviour that "contribute to the unique social and psychological environment of an organisation."(Guru, Raghavendra, Raghavendra, & Kumar, 2016). Needle (2010) argues that organisational culture symbolises the joint ideals, beliefs and rules of organisational units and is a result of such components as history, outcome, market, technology, scheme, kind of employees, management style, and national culture; culture considers the organisation 's vision, belief, standards, structures, signals, language, premises and habits

The culture of organisation indicates that the values and beliefs which clarify acceptable solutions to main problems of the organisational (Kong, 2003; Schein, 2010). The culture of an organisation can be a strategic resource that makes a sustainable competitive advantage, that according to the Resource-Based View is maintained through innovation, promoting learning, and risk-taking (David & Fahey, 2000; Zahra et al., 2004). The culture of the family business is as

well as tricky for rivals to imitate due to the ambiguity about their embeddedness and their origins in family history and dynamics (Dierickx & Cool, 1989; Gersick, 1997). There are also views that since culture cannot be changed swiftly, then substantial diseconomies are expected to increase (Hashai, Kafouros, & Buckley, 2015). The culture of the organisation is a tightly connected artefacts system, underlying assumptions, and espoused values (Schein, 2010). The inter-connectedness of the family business' assets of tangible and intangible inhibits the imitation of their cultures (Kontinen & Ojala, 2010).

In both empirical and theoretical grounds, it is well-established that the cultural distances between countries tend to alter over time (McSweeney, 2002). C. Yang and Chen (2007) state that deviations in the cultural predilection of the firms involved in a network can have a serious outcome on the ease with which knowledge is distributed both among and within companies. They say that the culture affects the type of information people are more inclined to and the manner in which that information is dealt with (Rungsithong, 2014). From previous literature, M. A. Farrell, Oczkowski, and Kharabsheh (2011) state that firms which incorporate learning within their culture are observed to gain from more advanced levels of learning attainment (Starbuck, 1992). Of the relationship between organisational culture and AMC, not much has been discovered as the research on the relationship is relatively new (Mujeeb, Masood, & Ahmad, 2011). The studies of alliance provide many perceptions on the significance of an "open" outlook toward cooperation and its influence on learning among the companies (Sluyts et al., 2011). There has been less research performed on the outcome of culture on internal learning and additional specifically on development of alliance capability (Rungsithong, 2014). The alliance capability development is connected with particular cultural attributes, more specifically with an unrestricted organisation culture(Chaharbaghi et al., 2005; Rungsithong, 2014).

Family firms form a particular kind of organisational culture. As alliance arrangements between companies with similar cultures evolve more efficiently, this facilitates alliance with other family firms (Clash, 2011). T. Ritter (1999, p. 472) set forth the openness of corporate culture as "emphasizing flexibility, spontaneity, and individuality (as characteristics that are typical of the culture of adhocracy) in contrast to regulation, stability, and control (as characteristics common to a hierarchy-based culture)". The firms are able to achieve their objectives through organisational cultures, as have found by various studies (Armstrong & Taylor, 2014; Carayannis, Sindakis, & Walter, 2015). Furthermore, several of these studies show how organisational cultures significantly affect the types of alliances (Cao, Huo, Li, & Zhao, 2015). For example, organisational cultures influence individual-level behaviours, for example, commitment (Ortega-Parra and Ángel Sastre-Castillo (2013), cooperativeness (Murphy et al., 2013), the skills of relationship (Beugelsdijk, Koen, and Noorderhaven (2006) and leadership that are instrumental in the cooperative interactions wanted in alliances (Amagoh (2009). Moreover, researchers have found that organisational culture has a significant influence on areas of learning (Di Pietro and Di Virgilio (2013); (Luvison & de Man, 2015).

Shaping the factors of organisational culture is a key to the ability of the firm to manage to learn effectively, this is according to the positive relationship between organisational culture and the mechanism of learning (Ajmal & Koskinen, 2008; C. L.-h. Chang & Lin, 2015). Knowledge management needs a commitment and a key shift in organisational culture at all a company levels to make it work (Alisa, 2017; Norman, 2004). Furthermore, Ajmal and Koskinen (2008) argued that while developing knowledge management systems, building a supportive culture the learning success is achieved. Thus, by the leveraging assets of knowledge, the organisational culture is a vital element of the ability of the company to create value (Ajmal & Koskinen, 2008; Kankanhalli, Tan, & Wei, 2005). Therefore, according to (Kankanhalli et al., 2005), learning between firms, and the organisational culture being of paramount significance for it. "Learning produces an environment in which the gaining of knowledge and skills is not only watched as a main each employee responsibility however as well as through partners is supported" (C. L.-h. Chang & Lin, 2015; Rodgers, Mubako, & Hall, 2017). Additionally, in order to assist the knowledge creation, storage, transfer, and application, the organisational culture is critically significant (Janz & Prasarnphanich, 2003; Leidner & Kayworth, 2006). Together, the eventual purpose of knowledge storage, as many authors believe that, is to embed employees' knowledge into the process and culture of the organisation, thereby developing the organisational performance (Massey & Montoya-Weiss, 2006; Ranasinghe & Dharmadasa, 2013). In order to share knowledge with others, shared organisational values influence the knowledge ownership and the individual's perception of subsequent tendencies (Lin & Dalkir, 2010; Ling, San, & Hock, 2009; Yiu & Law, 2012). Furthermore, knowledge participation needs the members of the firm to be willing to contribute their knowledge to the company (Eskerod & Skriver, 2007).

1.5. AMC and Aalliances Pperformance

The structure of this section may appear to be confusing. However, the best way to eliminate confusion is to develop the argument by discussing how the different AMC skills affect performance. Therefore, one needs to start right from the outset to identify the view on what the AMC skills are?

When referring to and analysing firms from the RBV, AMC is viewed as a resource that is fixed, heterogeneous and under the control of the company; hence serving as a base for higher performance (J. Barney, 1991; Wernerfelt, 1984). Kale and Singh (2007) find AMC to be particularly valuable as it increases the overall collaboration success, while in the view of Ireland et al. (2002) and Rothaermel and Deeds (2006) it helps realise partnership benefits. However, these components are heterogeneously distributed and often rare (Bharat N. Anand & Tarun Khanna, 2000; Rothaermel & Deeds, 2006). For instance, since a firm can build and improve AMC by utilising repeated business experiences in the organisation, it is difficult for other firms to supplicate

these abilities (J. Barney, 1991; Kale & Singh, 2009a). Non-imitability suggests that AMC is not a trait that can be substituted; as a substitution is a form of imitation (Barney, 1995 and Crook et al., 2008). This implies that AMC can become a primary source of competitive advantage (Habbershon & Williams, 1999).

Contrasting views on the explanations of AMC as provided by some researchers (Rothaermel & Deeds, 2006; Singh & Rao, 2016). For instance, AMC has been defined as a company's capability to manage several alliances successfully. Schilke and Goerzen (2010) on the other hand view AMC as a second-order construct that captures the extent to which firms possess appropriate management routines that enable them to manage their strategic alliance portfolios effectively. The concept of 'cooperative competency' has been proposed by some authors, where this concept depends on the degree of coordination, trust and communication in a specific relationship between numerous structural components (Singh & Rao, 2016; Sivadas & Dwyer, 2000). Previously researchers referred to these principles as 'combinative capabilities' of the firm or its 'architectural competence' (Henderson & Cockburn, 1994; Kogut & Zander, 1992). In essence, AMC consist of an organisation's skills that integrate and coordinate activities and knowledge among the various subunits and employees in the firms. Such mechanisms form the critical locus of learning within the firm, by generating and facilitating feedback regarding both on-going and prior experiments as well as the experiences in different departments of the firm (Pisano & Shih, 2009).

Kandemir et al. (2006) propose that both alliance learning and coordination are to be studied as AMC's dimensions, especially when trying to improve a firm's capability to accomplish its objectives of cooperation performance. Other researchers perceive AMC as a set of skills including communication, coordination and bonding (Schilke and Goerzen (2010). Typically, centralised alliances coordination enhances the firm's ability to capitalise and build new capabilities and build on its experience (Kale & Singh, 2009a). Coordination is aim at allocating resources and assigning tasks and synchronise functions to avoid overlap tasks between partners(Schilke & Goerzen, 2010).

2. Research Methodology

After identifying the problem of research or an interest area, the researcher has to identify suitable technique(s) to approach the problem. John W Creswell (2013) divided research philosophy into four assumptions: ontological, epistemological, axiological and methodological. P. Eriksson and Kovalainen (2008) state that for many researchers, ontology, methodology, epistemology, methods and paradigm are the philosophical assumptions. In order to give direction to this study, the research onion has been adopted ((P. Lewis, Thornhill, & Saunders, 2003). This onion shows the range of selections, strategies, paradigms, and steps followed by the researchers through the process of research, shown as Figure 1 Research philosophies in the research 'onion' Source (M. N. Saunders, 2011). Thus, the researcher in the current study will attempt to cover these layers of the onion and hence arrive at the appropriate method to consider for the research.

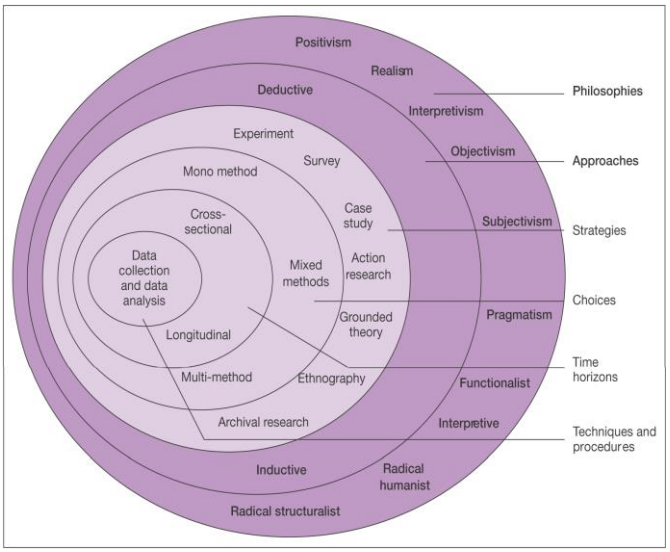

Figure 1 Research philosophies in the research 'onion' Source (M. N. Saunders, 2011)

2.1 Paradigm

One of the terms often used in social sciences is the paradigm. One of the best definitions of the paradigm is "a way of examining social phenomena from which particular understandings of these phenomena can be gained and clarifications attempted" (M. Saunders, Lewis, & Thornhill, 2012, p. 140). Paradigm attempts to question "what are the particular ways of data describe a scientific discipline through a specific period? P. Eriksson and Kovalainen (2008, p. 13). In other words, the research paradigm affects the design of research with the intention of providing the quality of research outcomes (John W. Creswell & Plano Clark, 2007). The philosophy of research can be used to show the theories, ideologies myths, official actions and perspectives that govern their activity and thinking (Gummesson, 2000). Also, several studies classified that philosophy as being used in social science into two main philosophical paradigms in the research: interpretive (Subjectivism) and Positivism (Objectivism) (Bryman, 2012; John W Creswell, 2013; Easterby-Smith, Thorpe, & Lowe, 2012).

2.1.1 Interpretive Paradigm

The interpretive paradigm is to "explain, understand, and demystify social reality through the eyes of various members"(L. Cohen, Manion, & Morrison, 2013, p. 19). This approach is all about trying to realise social phenomena by the meanings that people attach to them, such as, shared experiences, tools, language, publications, consciousness (Walsham, 2006). Data is subjective, and therefore its explanation is essential. As such, qualitative research is used by the interpretive researchers to offer an understanding of the organisational and social settings, based on building a holistic picture, complicated, shaped with words, reporting detailed views of members, and conducted in a natural environment

(John W. Creswell & Plano Clark, 2007). M. Saunders et al. (2012) pointed out that there are some writers would argue that the interpretive is highly suitable in the situation of management and business research, mainly in fields such as human resource management and behaviour of organisational.

Table 3 Summaries the distinction between positivist and Interpretivist (Decrop, 2006; M Easterby-Smith, R Thorpe, & A Lowe, 2002; P. Lewis et al., 2003).

Factor	Positivism	Interpretive
Research purpose	Discovering natural laws to predict and control events	Understanding and describing social situations
Ontological stance	Reality is already in existence and stable, ready to be discovered.	Relativism: no single point of view or value position is better than
	The objective of human cognition	others; subjective to human cognition
Epistemological stance (researcher's position)	Objectivism: the researcher is objective by viewing reality through a "one-way mirror". Dualism: the researcher and the object are independent entities	Transactional and subjectivism: the researcher is a "passionate participant" or interactively linked to the world being studied
Sampling requires	Large number selected randomly	Small numbers of cases chosen for a particular reason
Research logic	Deductive	Inductive
Nature of knowledge	Verified hypotheses established as facts or laws	Individual reconstructions coalescing around a consensus
Values	Value free	Values are integral part of social life
Methods	Purely quantitative, statistics, content analysis. Hypothetical-deductive approach (experimental design)	Mainly qualitative. Holistic-inductive approach (naturalistic inquiry)
Findings Generalisation	Findings are true Statistical probability	Findings are created Theoretical abstraction

2.1.2 Positivism (Objectivism)

The fundamental idea of positivism is that "the social world exists externally and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition" (Easterby-Smith, Thorpe, & Jackson, 2012, p. 22). The French philosopher, Auguste Comte (1853) was the first person to encapsulate this view of objectivism in research. He has been quoted as saying 'Since Bacon's time, that there can be no real knowledge however that which is based on observed facts as all good intellects have repeated (Pearce, (ii), an epistemological assumption, that is the knowledge only importance if it is based on notes of this external reality (Crotty, 1998b; Easterby-Smith, Thorpe, & Jackson, 2008; Roessl, 2005).

2.2 Research Strategy

The strategy of research is defined as the systematic and organised method of collecting and analysing data so that data might be obtained to understand the study problem (Jankowicz, 2013) fully. In order to answer the research questions by research strategy is the general planning requirement (Mark Saunders, Philip Lewis, & Adrian Thornhill, 2007). Subsequent to this, the choice of the philosophical optic is justified regarding the research methodology adopted and the nature of the problem (Bowling, 2014). From the research nature point of view, the research strategy can be classified as a quantitative, qualitative or mixed method (Bryman & Bell, 2007b; Mertens, 2014). Qualitative research stresses words rather than views and the quantification of social reality as an emergent property of particular formation (Bryman & Bell, 2007a). The quantitative research approach is regarded as a strategy of research that gives importance to quantification in the analysis and collection of data (Bryman, 2012). According to Erickson and Kaplan (2000) an effective combination of qualitative and quantitative approaches can produce much greater and beneficial outcomes.

2.2.1 Construct Measurement

In the questionnaire, all measurement items were formulated as Likert-type statements anchored by a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree) except for alliance experience and control variables. The survey pre-tested with a small group of academic and practitioner experts before sending out the final version.

2.2.2 Independent Variables

a) Alliance Experience

Alliance experience, as one antecedent to AMC, has been measured by a single item which is in line with previous AMC studies (Zollo et al., 2002). Alliance experience was measured by asking the respondents about the number of 2015). This statement covers two assumptions. (i), an ontological assumption, that reality is objective and external.

advantages the firm has seen involved in during last five years (Draulans & Volberda, 2003; Koen H Heimeriks & Duysters, 2007; Sampson, 2005).

b) Political Instability

To measure the political instability, as an antecedent to AMC, four items used to measure this variable using five Likert scales, and this scale was adapted from (Brunetti, Kisunko, & Weder, 1998). The items were designed to gauge the political instability, yielding the average numbers of violent political events (e.g. riots or political assassinations), the number of or the estimated probability of government change and the volatility of macroeconomic variables.

Perceptions are measured about how the family businesses are affected when destabilised or overthrown by the government by possibly unconstitutional or violent means, including acts of terrorism.

c) The Culture of the Family Business

Family business culture refers to the Family Influence on Power, and Culture (Barros, Hernangómez, & Martin-Cruz, 2016; Klein, Astrachan, & Smyrnios, 2005). The variable of family business culture has been measured through the influence and control of family culture on family businesses (Astrachan et al., 2002). As a family scale, it integrates the involvement and essence approach involvement of family members in ownership also management boards and governance, and principle for the companies, represented in the values of companies (Alsomali, 2013; Chua, Chrisman, Steier, & Rau, 2012; Sharma & Nordqvist, 2007). Experiential validation of the model of this study will also provide testing family involvement and characteristics of the family's values and culture (Barros et al., 2016; Chrisman et al., 2005; Litz, 1995; Sharma & Nordqvist, 2007).

2.2.2.1 Moderator (Social Capital)

In this study, the social capital construct has been adopted as a moderator on the relationship between AMC and alliance performance. Three dimensions measure the social capital: the structural dimension, cognitive dimension، and relational capital (trust). Three items have been adapted from Villena, Villena, Revilla, and Choi (2011) to measure these three dimensions. For the cognitive dimension, three scales were adapted from, (Jap, 1999; Kale et al., 2000a; Sarkar, Echambadi, Cavusgil, & Aulakh, 2001). These items are mostly concerned with congruence in organisational culture, a shared vision between parties, and business philosophies, goals. Three items have been adapted to measure the structural dimension, from Villena et al. (2011), and the author adopted this scale from (Inkpen & Tsang, 2005; Tsai & Ghoshal, 1998). These items measured the frequency of interaction, functions between the partners and the multiple connections across diverse hierarchical levels. Four items adapted from Villena et al. (2011) to measure the relational dimension, this scale was adapted from, Kale et al. (2000a) that to examine close interpersonal interactions, reciprocity, friendship, trust, and respect.

2.2.2.2 Alliance Management Capability (AMC)

AMC is regarded as a holistic concept that comprises a number of highly correlated, reinforcing dimensions. The reflective second-order construct attracts the complementarities between different first-order dimensions through their covariations and interactions (Jarvis, MacKenzie, & Podsakoff, 2003). In this study, AMC is modelled as a three-dimensional reflective second-order construct, that comprises alliance proactiveness, coordination, and learning (Schilke & Goerzen, 2010; Schreiner et al., 2009).

Table 4 AMC dimensions and their items

	Proactive
1	We actively monitor our environment to identify partnering opportunities.
2	We are alert to market developments that create potential alliance opportunities.
3	We often take the initiative to approach companies that have proposals similar to the business of our company
4	We are proactive and responsive in finding and "going after "Interorganisational technology transfer partnerships.
	Coordination
1	Our activities across different alliances are well coordinated.
2	We have processes to transfer knowledge across alliance partners systematically.
3	We ensure appropriate coordination among the activities of our different alliances.
4	There is a great deal of interaction with our partners on most decisions.
	Learning
1	We have the capability to learn from our partners.
2	We have the managerial competence to absorb new knowledge from our partners.
3	We have adequate routines to analyse the information obtained from our partners.
4	We can successfully integrate our existing knowledge with new information acquired from our partners.

Alliance proactiveness has been defined as the ability of the firm to identify potentially valuable partnering opportunities, and it is considered as the first dimension of AMC. The alliance proactiveness dimension measured by four items, as adapted from Schilke and Goerzen (2010) and (Sarkar, Echambadi, & Harrison, 2001). The second dimension, *alliance coordination*, is defined as the ability of the firm to effectively manage resources and activities between partners (Gulati et al., 2005; Schilke & Goerzen, 2010). Here, four items were used and adapted from, Schilke and Goerzen (2010) to measure the dimension of coordination, they developed it from (J. Mohr & Spekman, 1994; Pavlou & El Sawy, 2006). The third dimension of AMC, *alliance learning*, is defined as the firm's ability to facilitate the transfer of knowledge between partners (Jeffrey H Dyer & Nobeoka, 2000). To measure this dimension was four items the absorptive capacity scales of Schilke and Goerzen (2010), they developed it from (Matusik & Heeley, 2005; Pavlou & El Sawy, 2006) served as a basis for measuring this dimension as shown in Table.

2.2.2.3 Dependent Variable (Alliance Performance)

Different levels and measures of alliance performance have been used in various studies (Kohtamäki et al., 2018). For instance, alliance performance has been measured by financial performance (Bernard L Simonin (1997), alliance success rate organisational learning Kale and Singh (2007b), alliance satisfaction (Lui & Ngo, 2004), and operational performance. This study focuses on measuring the alliance performance at the firm level in the Libyan family business context. Collaborations between firms in the family business sector aim to improve efficiency on a daily routine basis and for the long-term benefits of the company. The respondents

were very well informed about their firms' alliances because they are either managers or owners of the family business, accordingly, makes managerial confident to evaluate the alliance performance. Thus, in this study dependent variable "alliance performance" measured regarding performance satisfaction and perceived goal fulfilment of the Libyan family business. Alliance performance is measured as the dependent variable in this study regarding performance satisfaction, perceived goal fulfilment and the alliances significantly enhance their competitive position in the Libyan family business. This scale was adapted from Schilke and Goerzen (2010), they developed it from (J. Mohr & Spekman, 1994; Pavlou & El Sawy, 2006).

2.2.2.4 Control Variables

Regarding the first variable, company sizes, research suggests that alliance performances may be influenced by the size of the company (N. K. Park and Mezias (2005), and the large companies being able to assign more resources to manage their alliance (Kale et al., 2002). Large companies can compete more efficiently than small firms because the larger companies have greater access to resources than small firms (Kotabe & Zhao, 2002). Therefore, in the conceptual model the size of firm is considered as the control variable. It was measured using an open-ended category where respondents were asked to specify the number of employees: Less than 4, 5 -9,10-49, 50-99, 100 and over. Age of company is a second critical control variable in this study. It is measured as the number of years since the founding of the firm (Al-Laham, Amburgey, & Baden-Fuller, 2010). All family businesses in this sample are fully owned firms by Libyan family (Sørensen & Stuart, 2000). Type of business is third control variable in AMC and impact on alliance performance (White & Siu-Yun Lui, 2005)). Subsequently the more complex joint tasks will require managers or owner to spend excellent time and effort working with the alliance partner. This study included eight dummy variables for Libyan family business activities, manufacturing, construction, service, retail trade, agricultural, transportation, tourism, with 'other' representing the eighth.

2.2.2.5 A pilot Study (Survey Pretesting)

A pilot study is always recommended using a small number of respondents before collecting the entire data. The pilot study practically results in significant developments to the survey and an over-all growth query effectiveness (Mark Easterby-Smith, Richard Thorpe, & Andy Lowe, 2002; Moser & Kalton, 1971). Also, the piloting of the questionnaire can increase the clarity of the questions by using the feedback to remove any confusion in the measurement wording (Gratton & Jones, 2010, p. 91). After getting, the surveys back from all the groups, their recommendations and observations were considered. Several suggestions and helpful comments regarding format, wording, and presentation were taken as shown in Table 5 and Table 6.

Expertise area and University name	**Feedback**	**Company name**
PhD student in engendering, at University of Huddersfield, and has experience about family business in Libya	We agree with the plans and policies goals of our family business. (Reabetation).	Al-Joud international for meat & livestock
PhD student in engendering, at University of Leeds, and has experience about family business in Libya	No Feedback	Directions Company

Table 6 Responses from academics

Expertise area and University name	**Feedback**
Table Error! No text of specified style in document. Responses from practitioners	PhD student in Strategic management, at University of Glasgow
	A doctor at University of Huddersfield
	PhD student in Strategic management, at University of Huddersfield
	PhD student in HR, at University of Huddersfield
	A doctor at University of Huddersfield
	A doctor at Al Asmarya University
	PhD student in HR, at University of Salford
	PhD student in account and finance, at University of

- A1 (Please indicate your opinion regarding each statement by ticking the appropriate box)
- B1 it is preferred to change it to:(Strongly Agree, Agree, Undecided, Disagree or Strongly Disagree)
- Clarify the purpose of the study.
- It is not necessary to mention the question of 5-point scales at the beginning of each section.
- Style the table of the questionnaire to be enlarged.
- Some dimension includes a large number of items.
- Subheadings are not necessary.
- Standardisation of some terms.
- The colour makes it not clear
- Regarding section D, page 3, in the VALUES questions, you mentioned, "Please rate the extent to which you agree with the following statements". So it will be better to use strongly agree to disagree scale strongly.
- Regarding section E, you wrote the questions 1 and two as (Do you), It is better to start the questions with (to what extent you have to cope with unexpected…)
- Section A: About Huddersfield yourself and your company.
- Please indicate, using the 5-point scale below, to what extent do you agree or disagree with each listed item. (1 = strongly disagree, 5 = strongly agree).
- Modify some items (e.g. clarification questions at the beginning of each dimension).
- Clarify the definition of alliance
- Standardisation of some terms.
- Section D: MAC (you need to insert the full name of the term)
- Section E1 Using the 5-point scales below; please indicate to what degree

	do you agree with the following statements?

Table 7 Overview of modifications based on expert judgement

Section	Preliminary items	Modified items
A	General information about your self your company	About yourself and your company
A1	For questions below, please tick [√] all relevant answers	For questions below, please choose the ONE most appropriate answer to indicate:
D	please rate the extent to which you agree with the following statements	1= Strongly agree to 5= Strongly disagree scale
F1	To what degree do you agree or disagree with the following statements about your market environment? 1= Not at all to 5= To a considerable extent	1=Strongly agree to 5=Strongly disagree scale
D2	We agree with the plans and policies goals of our family business. (Repetition)	Delete the Repetition
E2	We agree with the family business goals, plans and policies.	We agree with the goals, plans and policies of our family business.
G	Similar corporate Culture, values and management style.	Culture, values and management style are similar to our partners.
G	please indicate the extent to which your company and partners share the following statements	Please indicate the extent to which your company and partners share the following statements

2.2.3 Translation of the Questionnaire

As the survey would be distributed in the Libyan context, it was translated into the Arabic language. This was necessary to maximise respondents' understanding of the questions included.

2.2.3.1 Population

A population has been defined as all supporters of any defined category of people (Hartl, Clark, & Clark, 1997). The population also covers the whole group of people, actions or things of interest that the scholar needs to examine (Sekaran, 2006). Consequently, the population is the total number of units from which the sample is collected, as "it consists of all units such as individuals, households, or organisations to which one desires to generalise survey results" (Spitz, Niles, & Adler, 2006, p. 50). The population of this survey comprises all Libyan family businesses as shown in Figure 1 and Figure 2, located in Libya.

2.2.3.2 Sampling

In this research, as stated earlier, the aim is to explore the functioning of AMC in Libyan family business. While most of the private firms in Libya were created before 2011 (General Planning Council of Libya, 2006; OECD, 2016), the start of civil unrest in 2011 meant very few SMEs were created, due to the fragile situation in the country which has further impeded implementation of the necessary reforms (OECD, 2016b). Consequently, most family firms have alliance experience, due to the long years of working experience they have acquired.

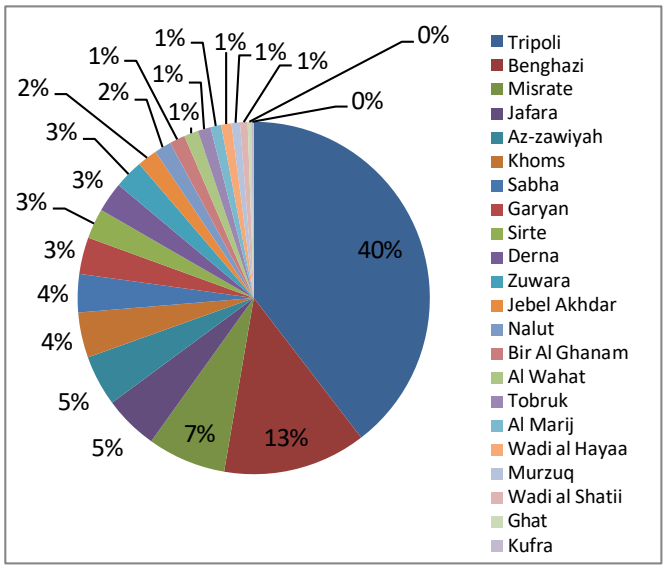

Figure 1 Shows the geographical distribution of family businesses SMEs in Libya (Economy, 2017):

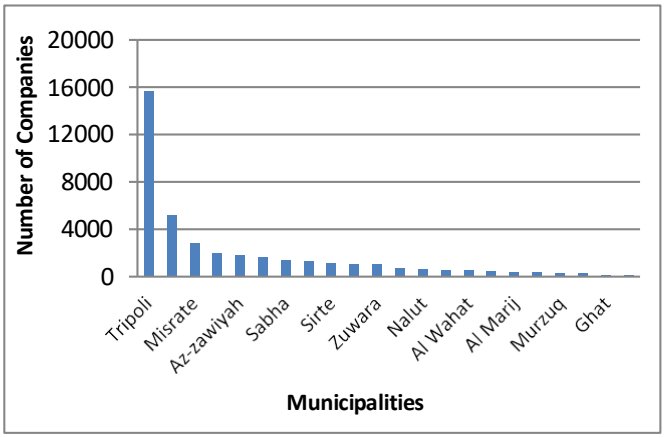

Figure 2 shows the geographic distribution of family businesses SMEs in Libya. (Economy, 2017)

2.3 Data collection

The researcher collected data during the period from May to June 2017 using the Bristol online surveys (BOS). The 1000 survey was sent by various means of communication through email, text messages, Viber, messenger, and WhatsApp. A total of 1000 random sample from Libyan family businesses was selected by using SPSS so that each population unit has an equal and independent chance of being chosen and involved in the sample, taking into consideration the limitation of resources available for research of this kind because of support available time, , effort and money (D. R. Anderson, Sweeney, Williams, Camm, & Cochran, 2016). Specifically, the sample contains Libyan family businesses in different sectors, targeting particularly those firms that have

alliances.In total, 167 usable surveys were returned, thus generating a 16.7% response rate. As mentioned above the rate of response among 5% and 39% might be expected from a mail questionnaire of this kind. Hence, to ensure sufficient data collected to allow subsequent in-depth analysis, it was essential to send follow up reminder emails to the targeted population. Through this stage, another 135 usable surveys were responded, thus making a 13.5% response rate. Overall, 302 appropriate surveys have been gathered for analysis, consequently acquiring a 30.2% response rate as shown below in Table (AlFahim, 2011; Karlsen, Andersen, Birkely, & Odegard, 2006).

Table 8 Data collection procedure to increase response

	2017	
Questionnaires emailed	May	June
	1000	
Questionnaires response	1st follow up email	2nd follow up email
	167	135
Total questionnaires usable response	302	

As shown in Table 9 the questionnaires not returned from the respondents were 455 (57 per cent). Received surveys were 345, which constituted 34.5 per cent of the questionnaires distributed. Of the total, 19 questionnaires were incomplete and 24 had reported not an alliance; and hence unacceptable for the purpose of the research. The usable questionnaires amounted to 302 (30.2%).

Table 9 the Questionnaire Distribution and Response Rate

The Number Of Family Businesses	Distributed Questionnaires	Not Received Questionnaires	Received Questionnaires	Excluded Questionnaires	Usable Questionnaires	Response Rate (%)
10,233	1000	455	345	43	302	30.2%

2.3.1 Normality Assessment

Normality is one of the most fundamental assumptions in multivariate analysis. This assumption mentions the shape of data distribution for each variable and its correspondence to the normal distribution (Barbara, 2001). The data is expected to be normally distributed if the Skewness standard value is ±1.96 and the standard Kurtosis value is in ±3 (Haniffa & Hudaib, 2006). Table shows that the data collected has skewness ranging from -0.046 to -1 and kurtosis ranging from -1.198 to 1.227, implying that the data is normally distributed.

Table 10 Normality assessment based on Skewness and Kurtosis

Variable name	Skewness	Kurtosis
AMC	.562	-.813
PRT	-.242	-.972
COD	-.103	-1.198
LRN	-.110	-1.136
CFB	-.046	-1.116
PI	-.213	-.979
SC	-.159	-1.106
CD	-.600	-.616
Tr	-.675	-.288
SD	-1.00	1.227
AP	-.594	-.291

Notes: Alliance management capabilities (AMC), Alliance Proactivnasses (PRT), Alliance Coordination (COD), Alliance Learning (LRN), Culture of Family Business (CFB), Political Instability (PI), Alliance experience (AE), Structural Dimension (SD), Cognitive Dimension (CD), Trust (Tr) and Alliance performance (AP).

2.3.2 *Reliability*

Reliability refers to the range to which the instrument is consistent and unbiased over time (Bryman & Bell, 2015; Sekaran & Bougie, 2016). In other words, reliability is indicated to the consistency of a method in measuring concepts that it is designed to measure, and it is mostly concerned with the measurements stability and the results of the research (Amhalhal, 2013). Reliability is present when other researchers can get the same results by repeating the study (Easterby-Smith, Thorpe, & Jackson, 2012; P. N. Ghauri & Grønhaug, 2005). When selecting scales to include in the study, it is significant to find scales that are reliable (J. Pallant, 2007). Cronbach's alpha coefficient is the most commonly used indicator of internal consistency (Amhalhal, 2013; Dunn, Baguley, & Brunsden, 2014). Table 11 shows the test result for each item and variable; all the items were tested using SPSS 22. Cronbach's Alpha value is more than the recommended value of 0.70. These are led to support the result of the internal reliability and consistency of all the items.

Table 11 Reliability results for the pilot study

Construct	Item	Cronbach's alpha if item deleted	Cronbach's alpha
Proactiveness	PRT1	0.886	0.769
	PRT2	0.886	
	PRT3	0.888	
	PRT4	0.889	
Coordination	COD1	0.893	0.769
	COD2	0.894	
	COD3	0.893	
	COD4	0.888	
Learning	LRN1	0.885	0.711
	LRN2	0.887	

	LRN3	0.890	
	LRN4	0.887	
	LRN5	0.885	
	LRN6	0.888	
	CFB1	0.891	
The culture of the family business	CFB2	0.887	0.805
	CFB3	0.887	
	CFB4	0.887	
	PI1	0.886	
political instability	PI2	0.891	0.726
	PI3	0.887	
	PI4	0.888	
	SD1	0.888	
Structural dimension	SD2	0.886	0.714
	SD3	0.887	
	CD1	0.887	
Cognitive dimension	CD2	0.890	.0776
	CD3	0.889	
	CD4	0.890	
	Tr1	0.884	
Trust	Tr2	0.886	0.789
	Tr3	0.887	
	Tr4	0.887	
	AP1	0.886	
Alliances performance	AP2	0.887	0.742
	AP3	0.885	
	AP4	0.885	

2.3.3 Validity

Validity is the most critical criteria of research (Bryman & Bell, 2007a). It mentions to the degree of significance of the statistics measured (Bryman & Cramer, 2005). It suggests that the validity question draws attention to whether the researchers measure the right concept or not (Cooper & Emory, 1995; Latip, 2012; Zahoor, 2017). Consequently, the validity concept is concerned with the representativeness of the actual situation of the research findings, and its accurateness (Collis & Hussey, 2009).

Second, since it is concerned with the extent to which measurement scale reflects which is thought to be measured, it is seen as the most significant kind of validity (Sekaran & Bougie, 2016). Through the items included in the measurement scale and a careful meaning of the research subject, content validity can be achieved (Emory & Cooper, 1991). It can also help in judging how well the instrument meets the standard by using a group of experts or individuals (Litwin & Fink, 1995). It has been apparently hard to improve measures that have agreed to the validity because there is a disagreement between researchers of social science regarding the content of many ideas (De Vaus & de Vaus, 2001).

Third, validity displays how well the results derived from employing the measure that fits the theoretical and theories assumptions about which the test is designed (Sekaran, 2006). By tracking the instrument scale performance through the years in various populations and settings, it is usually evaluated (Latip, 2012; Litwin & Fink, 1995). It has been recommended to use measurement scales or established constructs and consider the expert's opinion (De Vaus & de Vaus, 2001). To ensure questionnaire validity, various efforts were made. First, the literature review was extensively conducted to define the purpose and the topic of the research (Amhalhal, 2013). Second, scales, questions, and items applied to various populations and in various settings such AMC, political instability and family business were adopted in this research, therefore establishing construct validity as shown in Table . According to Sekaran and Bougie (2016), drawing upon valid literature survey involves by the development of a valid questionnaire instrument, to make sure that any questions collected from the literature are built on the instruments of validated questionnaire. Third, the survey was also passed to experts, several doctoral students and friends, and a pilot study were conducted.

Table 12 Scales Used in prior studies.

Questions	References
Q1	(Rungsithong, 2014)
Q2	(Koen H Heimeriks, Duysters, & Vanhaverbeke, 2005; Rungsithong, 2014)
Q3	(K. Heimeriks, 2008; Kauppila, 2015; Rungsithong, 2014; Schilke & Goerzen, 2010; Shakeri & Radfar, 2016)
Q5	(K. Heimeriks, 2008)
Q6	(Shakeri & Radfar, 2016; Sluyts et al., 2011)
Q7 to Q21	(Kandemir et al., 2006; Kauppila, 2015; Schilke & Goerzen, 2010)
Q22	(Draulans & Volberda, 2003; K. Heimeriks, 2008; Koen H Heimeriks & Duysters, 2007; Schilke & Goerzen, 2010; Sluyts et al., 2011).
Q28 to Q40	(Luvison & de Man, 2015) (Craig et al., 2014; Luvison & de Man, 2015)
Q41 to Q49	(Brunetti et al., 1998; Seddighi, Nuttall, & Theocharous, 2001)
Q50to Q53	(Calantone, Garcia, & Dröge, 2003; Jaworski & Kohli, 1993; Lee & Cavusgil, 2006)
Q59 to Q80	(Calantone et al., 2003; Jaworski & Kohli, 1993; Lee & Cavusgil, 2006)
Q81 to Q86	(Kale & Singh, 2007a; Schilke & Goerzen, 2010; Shakeri & Radfar, 2016)

2.4 Method of Data Analysis

The assumptions of this study require various regression, mediation and moderator effects to analyse whether alliance experience, political instability and culture of the family business are antecedents of AMC in improving alliance performance. SPSS 22 and AMOS 22 were used for

the data analysis (Bowling, 2014). The SPSS is used to analyse descriptive statistics, linear regression and simultaneous equation model, and for statistical analysis of social data, the SPSS is one of the best-known and widely employed software packages. Confirmatory factor analysis (CFA) was tested by the software referred to as AMOS (Rungsithong et al., 2017). Through AMOS test for the hypotheses of research, regression path, the multiple medications, and the multiple moderation relationships were conducted.

2.4.1 Mediation Effect and Indirect Mediation Analysis

A mediator is a variable that can significantly account for the link among the variables "independent and dependent" (Baron & Kenny, 1986; Rungsithong, 2014). Based on

Figure 3 when a mediator transmits the causal effect of an independent (X) on a dependent (Y), (M), and often said that to occur effect are used interchangeably because (M) is affected by (X), and (M), in turn, influence (Y), consequent that (Y) will be affected by (X) (Preacher, Rucker, & Hayes, 2007). The total effect, indirect and direct effect effects in the case of an independent variable (X), mediating variable (M) and the dependent variable (Y) where a total of X effect on (Y) is mentioned to as (c) (Rungsithong, 2014). This total effect is understood as the predictable quantity through which two cases that differ through one unit on (X) are predictable to differ on (Y), and this direct effect can be a grouping of the other indirect effects (M. H. Hayes, 2009). However, the mediation effect suffers a drawback owing to the hypothesis that the 'total effect' from (X) to (Y) needs to be present (Rungsithong, 2014). Baron and Kenny (1986) proposed that the causal steps approach is one of the most widely used methods for testing hypotheses about intervening variables effects. For example, in the evaluation of indirect effects, even when there is no evidence for a significant total effect, it is quite potential to find that one is significant (Preacher et al., 2007).

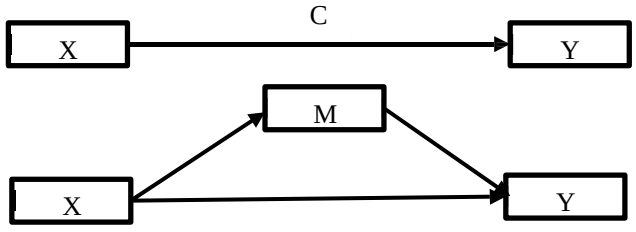

Figure 3 direct and indirect effect

2.4.2 Bootstrapping

Bootstrapping is a modern approach in nonparametric resampling process being an additional method advocated for testing the indirect effect that does not impose the assumption of normality of the sampling distribution (Preacher & Hayes, 2008). A nonparametric method based on resampling with replacement is undertaken many times, e.g. 5000 times (Lockwood & MacKinnon, 1998). Through this approach, one is to build confidence intervals for the mediation and an empirical approximation of the sampling distribution by repeating this procedure thousands of times (Bollen & Stine, 1990; Lockwood & MacKinnon, 1998; MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008; Shrout & Bolger, 2002). In extensive sets of simulations, bootstrapping appears to be more robust than the Sobel test, and the causal steps method for testing is intervening variable effects (MacKinnon et al., 2004). Although it is a widely used method, the strategy of causal steps cannot be suggested except in large samples (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher & Hayes, 2004). In this current study bootstrapping is used to assess the hypothesised mediation effects of AMC on the relationship between the dependent (alliance experience, the culture of family business and political instability) and independent (alliance performance) variables.

4. Results and Discussion

4.1 Descriptive Statistics

The nine latent constructs were measured by some items as shown in Table . Descriptive statistics for items of contracts (alliance proactivnasses, alliance coordination, alliance learning, culture of family business, political instability, alliance experience, structural dimension, cognitive dimension, trust, and alliance performance), which they rated on a Likert scale (1=strongly disagree, 2=disagree, 3=Uncertain, 4=agree, 5=strongly. The respondents were owners and managers of Libyan family business, and they were asked about information of AMC, alliances experience, the culture of family business, political instability, and alliance performance. The descriptive statistics in this study include mean, range, minimum and maximum, standard deviation, skewness (Kurtosis is a measure of whether the data are light-tailed or heavy-tailed relative to a normal distribution. Skewness is a measure of symmetry, or more precisely, the symmetry lack) for all variables of the study and dataset or a distribution, is symmetric if it looks the same to the left and right of the centre point). As shown in Table 12, the mean value ranges from 3.03 to 4.02; suggesting that most respondents agree with the items posted in the questionnaire. Regarding criteria related to normality, data is considered to be normal if skewness is between -1 and +1 and kurtosis is between -2 and +2 (Bulmer, 1979; D. George & Mallery, 2010; Shiel & Cartwright, 2015). The ranges of standard deviation skewness value were from -1.039 to -.255, and the kurtosis values were ranging from -.821 to 068. The results of the study showed that all of the items were considered to be normally distributed.

Table 13 Descriptive Statistics for items of constructs

	Per cent (%)					Mea					
						Min	Max	n	S D	Skewness	Kurtosis
	1	2	3	4	5						
PRT 1	7.3	18.5	22.5	42.1	9.6	1	5	3.28	1.098	-.470	-.621
PRT 2	6.6	18.5	24.5	39.7	10.6	1	5	3.29	1.09	-.414	-.614
PRT 3	5.3	19.5	24.2	42.4	8.6	1	5	3.29	1.05	-.438	-.583
PRT 4	7.3	17.5	21.9	42.4	10.9	1	5	3.32	1.108	-.499	-.583
COD 1	8.9	18.9	21.9	38.7	11.6	1	5	3.25	1.16	-.399	-.764

COD 2	6.3	13.9	22.5	44.4	12.9	1	5	3.44	1.079	-.619	-.283
COD 3	8.3	14.9	20.9	41.4	14.6	1	5	3.39	1.15	-.556	-.536
COD 4	6.0	15.6	20.5	42.4	15.6	1	5	3.46	1.11	-.559	-.463
LRN 2	7.9	17.2	27.8	38.1	8.9	1	5	3.23	1.09	-.418	-.555
LRN 3	8.6	20.2	23.8	34.8	12.6	1	5	3.23	1.16	-.294	-.821
LRN 4	7.9	16.9	25.5	33.8	15.9	1	5	3.33	1.17	-.358	-.712
LRN 5	6.6	14.6	26.2	33.1	19.5	1	5	3.44	1.15	-.417	-.613
CFB1	6	19.2	22.8	40.4	11.6	1	5	3.32	1.09	-.411	-.649
CFB2	7.9	18.9	24.8	37.7	10.6	1	5	3.24	1.12	-.374	-.690
CFB3	8.3	20.5	23.2	39.7	8.3	1	5	3.19	1.11	-.386	-.751
CFB4	8.3	17.2	21.5	40.4	12.6	1	5	3.32	1.15	-.473	-.655
PI2	6	17.9	21.5	45	9.6	1	5	3.34	1.06	-.540	-.502
PI3	3.6	14.2	19.9	47.7	14.6	1	5	3.55	1.02	-.651	-.172
PI4	5.3	16.9	20.9	45.4	11.6	1	5	3.41	1.07	-.563	-.433
CD1	3.6	10.6	20.2	43	22.5	1	5	3.70	1.05	-.713	-.016
CD3	5.3	8.9	17.9	39.7	28.1	1	5	3.76	1.115	-.842	.068
CD4	6.3	9.9	17.2	39.4	27.2	1	5	3.71	1.153	-.808	-.102
Tr1	4	12.3	17.5	45.4	20.9	1	5	3.67	1.061	-.735	-.073
Tr2	3	12.6	19.2	43.7	21.5	1	5	3.68	1.040	-.654	-.190
Tr3	1.7	13.2	17.5	48.3	19.2	1	5	3.70	.980	-.652	-.163
Tr4	2.3	13.6	17.2	48.7	18.2	1	5	3.67	1.000	-.683	-.120
SD1	4.6	9.3	19.2	38.7	28.1	1	5	3.76	1.100	-.789	-.004
SD2	2	8.3	13.9	51.3	24.5	1	5	3.88	.970	-.945	.743
SD3	2	10.6	13.2	46.7	27.5	1	5	3.87	.998	-.868	.238
AP1	2.3	10.3	18.2	39.1	30.1	1	5	3.84	1.040	-.736	-.114
AP2	2	9.3	10.6	41.1	37.1	1	5	4.02	1.015	-1.039	.497
AP3	2	10.6	15.2	46.7	25.5	1	5	3.83	.992	-.806	.154
	Less than 2	2 to 4	5 to 10	More than 10		1	4				
AE	6.0	20.2	42.4	28.1		Less than 2 allian ces	More than 10 allian ces	3.03	.995	-.255	-.261

Notes: Alliance Proactivnasses (PRT), Alliance Coordination (COD), Alliance Learning (LRN), Culture of Family Business (CFB), Political Instability (PI), Alliance experience (AE), Structural Dimension (SD), Cognitive Dimension (CD), Trust (Tr) and Alliance performance (AP).

4.2 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is a widely used data-reduction technique that identifies how many underlying factors best represent a set of variables (Hair et al., 2006). It is typically applied in the early stages of research to examine interrelationships among variables and reveal their underlying structure (Uffen et al., 2012). The goal is to condense many items into a smaller number of meaningful dimensions (Pallant, 2001; Tabachnick & Fidell, 2007a). High correlations among groups of variables indicate they measure the same underlying construct (Karver et al., 2006).

In order to "conduct an EFA, "two main issues need to be considered in determining whether a particular data set is suitable for factor analysis: sample size and the strength of the relationship among the variables" (Pallant, 2010, p.182). Regarding the first aspect, Karver et al. (2006) conclude that "it is comforting to have at least 300 cases for factor analysis" (Tabachnick & Fidell, 2007b, p. 640). However, they concede that smaller sample size (e.g., 150 cases) should be sufficient (above 0.80). For instance, Hastings, Horne, and Mitchell (2004) and Gorsuch (1990) recommended sampling at least 100 subjects. Another provided the following scale of sample size adequacy: 50 – very poor, 100 – poor, 200 – fair, 300 – good, 500 – very good, and 1,000 or more – excellent (P. Kline, 2014). In this research, the sample size is not a problem as it is higher than 300 (n=302). Nevertheless, according to a study conducted by Hair et al., 2010, P102. The main assumptions factors for analysis are that some fundamental structure not exists in the selected set of variables, samples observations must be more than variables, 50 observations should be the minimum absolute sample size and finally 5:1 ratio for observations to variables (Othman, 2014).

Moreover, the sample necessity have more observations than variables, and a minimum absolute sample size should be 50 observations; and the desired ratio of five observations per variable, that when some underlying structure does exist in the set of chosen variables, according to the basic expectations underlying factor analysis (J. Hair, Black, Babin, & Anderson, 2010; Othman, 2014). For the inter-correlation strength between items Tabachnick and Fidell (2007a) suggested that a correlation matrix should be inspected for any evidence of coefficient value > 0.3. Two statistical measure was generated and identified to measure the factorability of the data: The first test is Bartlett's test of Sphericity; the second is the Kaiser Meyer-Olkin (KMO) measure of sample suitability (Kaiser, 1974). The Barlett's Examination of Sphericity should be significant ($p<0.05$) to be appropriate for factor analysis (J. Hair et al., 2010). The KMO directory ranges from Zero to One, with 0.50 recommended a minimum value for factor analysis and 0.80 recommended as the brilliant value (Hair et al., 2010). For this research, the sample was first measured for its appropriateness for factor examination. Bartlett's Examination of Sphericity was highly significant ($p<0.001$), and the KMO measure of sampling adequacy had a value of (0.785), exceeding the recommended value of 0.6 Kaiser (1974), supporting the factorability of the matrix (Othman, 2014). The principle component analysis (PCA) was used, the research conducted an orthogonal varimax rotation as the factors affecting the performance of alliance in the context of the present research were presumed not to be correlated with one another (in contradict to oblique rotation). In order to evaluate the suitability of the extraction and number of factors, Hair, et al. (2010) recommended that "three criteria were commonly used: latent root criterion, the percentage of variance criterion and screen test criterion".

Nevertheless, a solution that accounts for 60 per cent of the total variance satisfies the variance criterion percentage and an eigenvalue greater than one satisfies the latent root criterion. It is vital to calculate the variability in scores (the variance) for any given measures or variables, (Othman,

2014); Field, 2009). Rendering to Hair, et al. (2010), "commonality is the total amount of variance an original variable share with all other variables included in the analysis". "A variable that had no specific variance (or random variance) would have a commonality of one, while a variable that shared nothing with other variables would have a commonality of zero" (Field, 2009). However, there is no particular large or small specification parameter for communalities measurement for practical consideration 0.50 score is often considered significant (Joe F Hair, Ringle, & Sarstedt, 2011). An additional criterion used is Cattell's screen test (Cattell, 1966; Othman, 2014). In order to find a point at which the shape of the curve changes direction and becomes horizontal, this involves plotting each of the eigenvalues of inspecting the plot and the factors (Devos, 2013; Othman, 2014). Retaining all the factors above the 'elbow', or break in the plot, as these factors contribute the most to the explanation of the variance in the dataset (Cattell, 1966).

Table 14 Factor loading

	Component								
No:	1	2	3	4	5	6	7	8	9
Alliance Proactivnasses									
PRT3	.910	.102	.248	.192	.112	.185		.286	.278
PRT1	.881		.189	.243		.181		.261	.288
PRT2	.849		.304	.232	.131	.196	-.110	.255	.269
PRT4	.844		.296	.152		.187		.348	.281
Trust									
Tr3		.890				.223	.219		.130
Tr1		.848				.198	.249		
Tr2		.830				.258	.276		
Tr4		.803				.163	.109		
Alliance Coordination									
COD3	.255		.825	.266	.168				.202
COD2	.167		.822	.222					.229
COD4	.232		.817	.253	.142				.268
COD1	.330		.799	.266	.223				.293
Alliance Learning									
LRN3	.241		.291	.837	.223	.148			
LRN5	.179		.282	.825	.168	.113			.190
LRN4	.176		.181	.809	.175				
LRN2	.211		.274	.809	.127	.237			.159
The culture of Family Business									
CFB2			.173	.148	.792				
CFB3				.199	.792				
CFB4			.158	.155	.779		-.112		
CFB1	.220		.127	.142	.730			-.198	
Structural Dimension									
SD3	.208	.226		.123		.867	.172	.116	
SD2	.114	.101		.182	.101	.858			
SD1	.226	.337		.101		.767	.175		
Cognitive Dimension									
CD3	-.102	.193					.835		
CD4		.201				.105	.814	.139	.114
CD1		.216				.161	.797	.133	
Alliance Performance									
AP3	.241							.856	.312
AP1	.330		.149					.825	.229
AP2	.331					.176	.244	.755	.270
Political Instability									
PI4	.131	.165	.254				.116	.271	.836
PI3	.301		.238		-.102	.135		.179	.787
PI2	.376		.235	.146			.110	.332	.766

KMO=0.785
p-value(Chi-Square)<.001
total variance explained= 69%

In this study, as shown in Table 15, the researcher has taken all variable items having commonality score above .50 as a threshold point. The factor analysis in Table 15 shows that nine factors had eigenvalue greater than 1 (latent root criterion) with an eigenvalue of 5.501, 3.631, 3.031, 2.241, 2.112, 1.877, 1.483, 1.389, 1.121, respectively. These nine components explained 69.951% of the variance (variance criterion). Cattell's scree plot showed that the shape of the curve after factor nine-changed direction and became approximately horizontal indicated that there were nine-factor solutions.

Table 15 Total Variance Explained

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.501	17.19	17.191	5.501	17.191	17.19	4.198
2	3.631	11.35	28.537	3.631	11.346	28.54	3.231
3	3.031	9.471	38.008	3.031	9.471	38.00	3.499
4	2.241	7.002	45.010	2.241	7.002	45.01	3.341
5	2.112	6.600	51.610	2.112	6.600	51.61	2.726
6	1.877	5.865	57.475	1.877	5.865	57.47	2.628
7	1.483	4.634	62.110	1.483	4.634	62.11	2.411
8	1.389	4.339	66.450	1.389	4.339	66.45	2.683
9	1.121	3.502	69.951	1.121	3.502	69.951	2.812
10	.723	2.258	72.210				
11	.682	2.131	74.341				
12	.659	2.060	76.401				
13	.609	1.903	78.304				
14	.585	1.829	80.134				

15	.549	1.716	81.849
16	.529	1.654	83.503
17	.470	1.469	84.973
18	.457	1.427	86.399
19	.429	1.340	87.739
20	.416	1.301	89.041
21	.396	1.238	90.278
22	.379	1.185	91.463
23	.372	1.161	92.625
24	.347	1.083	93.708
25	.334	1.042	94.750
26	.318	.993	95.743
27	.289	.902	96.644
28	.263	.822	97.466
29	.225	.702	98.168
30	.212	.662	98.829
31	.195	.609	99.438
32	.180	.562	100.00

4.4 Structural Equation Modelling

This study applies the Structural Equation Modelling (SEM) approach as a common multivariate method used in social science to analysis multiple indicators of latent variables. SEM is defined as "*multivariate technique combining aspects of factor analysis and multiple regression that enables the researcher to simultaneously examine a series of interrelated dependence relationships among the measured variables and latent constructs (variates) as well as between several latent constructs*" (E. Hair et al., 2006, p. 634). In order to examine the relationships between underlying factors (constructs), and to test different types of theoretical models, SEM is a statistical method can apply (Schumacker & Lomax, 2004). There are three types of SEM; Measurement Model, Structural Model, (Byrne & Van de Vijver, 2010) and Path Analysis (Awang, 2015; J. Hair et al., 2010). Most commonly cited types of SEM in the field of social sciences are (i) measurement models such as confirmatory factor analysis, and (ii) structural model that is related to the independent and dependent variable was linked to test the hypotheses (Othman, 2014; Richter, Sinkovics, Ringle, & Schlaegel, 2016). The measurement model defined as "a Sub-model in SEM that (1) specifies the indicators for each construct, and (2) assesses the reliability of each construct for estimating the causal relationships" (Hair et al. 1998, p. 581). Due to the latent variables are a theoretical construct, consequent they cannot be measured directly. Thus, the indicators or observed variables must be identified (Zulu, 2007). Following this procedure, measuring latent variable can be conducted and then examining the importance of each indicator in the measuring of the construct. The Confirmatory Factor Analysis (CFA) (Byrne, 2010) represents the measurement model. The justifications for applying SEM for this research are as follows. First, using SEM, it is possible to test the whole model fit in one go. Second, for modifying and measuring the models, SEM offers complete statistical indicators (Joseph F Hair, Black, Babin, Anderson, & Tatham, 1998b; R. B. Kline, 2015). Third, SEM is not limited to test the relationships between concepts in models however is capable of examination the relationships between latent factors and observed variables (Purpura, 1997). Finally, the relationships between the observed variables and corresponding factor (construct) are used to identify the variables that are not related to the construct significantly (Y.- S. Wang, Wang, & Shee, 2007).

4.5 Confirmatory Factor Analysis

In the advanced stage of the process of research when a theory is to be tested on its underlying processes, confirmatory factor analysis (CFA) is a much more sophisticated technique applied by modelling of the structural equation (Brown, 2014). "CFA is employed to confirm the relationship between a set of measurement items and the already established hypothesis and their respective factors" (Netemeyer, Bearden, & Sharma, 2003, p. 148). The researcher uses measurement theory to specify a previous number of factors also is there any variable load on those factors (Fabrigar, Wegener, MacCallum, & Strahan, 1999). In order to ascertain that pre-applied linkages by theory exist in the data, this analysis has been applied in the study (Hair et al., 2006; Halepota, 2011). In the field of social sciences, the concern of construct reliability with the level specific measure is related to other measures, consistently with the theoretically derived hypothesis concerning the principle (constructs) that are being measured (Carmines & Zeller, 1979; Halepota, 2011). Therefore, depending on the principle discussed, the CFA is used for example a strict measurement for construct validity, Furthermore, to confirm that the theoretical implication of the construct is empirically taken in an actual sense through its indicators (Bagozzi, Yi, & Phillips, 1991).

There are several advantages delivered by the CFA approach. First, in any specific application, the appropriate measures of the overall degree are provided under CFA (Halepota, 2011). Second, the application of CFA provides helpful information as to if and how discriminant validity is achieved and how well the convergent validity is achieved. Third, CFA makes available the explicit results for separating variance into error components, a trait, and method (Bagozzi et al., 1991; Steenkamp & Van Trijp, 1991). Because of the importance attached to calculate coefficient alpha, this approach is used to test the uni-dimensionality of scale (an indicator of reliability) and calculation of composite scores (Ponterotto & Ruckdeschel, 2007). 'Measures that satisfy this definition of uni-dimensionality have been referred to as "congeneric" measurements Jöreskog (1971) or "point" variables (Burt et al., 2013). The importance of uni-dimensionality has been stated succinctly by Hattie (1985 p. 49): "That a set of items forming an instrument all measure just one thing in common is a most critical and basic assumption of measurement theory." Composite scores in statistics and research design refer to composite measures of variables, i.e. measurements based on multiple data items (Babbie, 2015). Therefore, CFA was performed to validate the measurement model (outer model) by examining the association between items/indicators and their respective

underlying constructs. AMOS 24 assesses measurement model by confirmatory factor approach.

4.6 Assessing model fit

Goodness-of-fit (GOF) indices are used to assess the degree to which the model has a good or poor model fit across using the goodness of fit indices (Joseph F. Hair, 2010). There are a number of indices have been used in order to assess goodness-of-fit such as absolute fit indices. Five indices were used in the current study: χ^2/df, RMSEA, and PCLOSE, SRMR and CFI see Table . Five items were dropped to improve the model. They were two from Learning (LRN1 and LRN6), one from alliance performance (AP4), one from political instability variable, and one from cognitive domination variable (CD2). After dropping these, items the model indices were improved and reached the acceptable level. The values of resulting indices were above the acceptable level, meaning that the data set is appropriate for the AMC measurement model see table 16 and 17 below.

Table 16 Fitness indices and corresponding thresholds

Index	Abbreviation	Acceptable level
Normed Chi-Square	χ^2/df	1-3 (Joseph F. Hair, 2010).
Root Mean Square Error of Approximation	RMSEA	≤0.08 (R. B. Kline, 2005)
P of Close Fit	PCLOSE	≥0.05 (Byrne, 2010)
Standardised Root Mean Square Residual	SRMR	<0.08 (Joseph F. Hair, 2010)
Comparative fit index	CFI	>0.90 (Joseph F. Hair, 2010)

Table 17 Fit indices of AMC measurement model

Index	χ^2/df	RMSEA	PCLOSE	CFI	SRMR
Initial iteration	3.008	.082	.000	.813	.1041
Final iteration	1.92	.055	.133	.92	0719

4.7 Validity

In social research, the measurement validity is considered to be a serious concern. Validity is defined as "The accuracy of a measure or the extent to which a score truthfully represents a concept" (W. G. Zikmund, Babin, Carr, & Griffin, 2013,). In order to assure that the indicators used to measure the constructs are valid before testing the structural model the testing validity should be conducted (Latip, 2012). Reflective measurement models are evaluated by their internal consistency, the uni-dimensionality of the constructs, the convergent validity of the measures associated with the constructs, and their discriminant validity (Schumacker & Lomax, 2004). *Construct Validity*: c*onvergent Validity* and *Discriminant Validity*. In addition, an indicator's loadings

The convergent validity can be defined as the extent to which many items measuring the same concept agree. (Ramayah, Yeap, & Ignatius, 2013). Based on the classical test theory, the convergent validity has its basis on the relationship between responses taken using different methods of measuring a certain construct (Peter, 1981). Hair et al. (2010) stated that scholars using the factor loading in addition to the average variance extracted (AVE) to assess and evaluate the convergence validity. On a final note, the AVE measures the variance encapsulated by the indicators relative to measurement error, and this should be higher than 0.50 in order to justify the use of the construct (FERNANDES, 2012; Joe F Hair et al., 2011). The resulting loading is used to assess the convergent validity, and this type of validity can be the achieved if item loading for each construct exceed 0.50 in order to achieve convergent validity (Aggelidis and Chatzoglou, 2012; Gefen and Straub, 2005; Hair et al., 2010; Holmes-Smith, 2011; Sun and Teng, 2012). In this study, ta he AVEs ranged from 0.50 to 0.70, which were all within the recommended range, see Table . Therefore, the entire latent variables satisfied the threshold value and were considered to have met the standard recommended for convergent validity. In addition, all standardised loading were above 0.50, see Table 18 and 19.

Table 18 Results of Convergent Validity for AMC Measurements Model

Items	Proactivnasses	Coordination	Learning	The culture of Family Business	Political Instability	Structural Dimension	Cognitive Dimension	Trust	Alliance Performance
AVE	0.70	0.56	0.57	0.5	0.5	0.562	0.512	0.626	0.527

Notes: Average Variance Extracted (AVE)

Table 19 Standardised loading for AMC measurement model

Item	Construct	Loading	Item	Construct	Loading
Pro1	PROAC	0.842	Tr1	Tr	0.798
Pro2	PROAC	0.814	Tr2	Tr	0.771
Pro3	PROAC	0.899	Tr3	Tr	0.882
Pro4	PROAC	0.788	Tr4	Tr	0.703
Coo1	Coor	0.764	PI1	PI	0.724
Coo2	Coor	0.719	PI2	PI	0.625
Coo3	Coor	0.751	PI3	PI	0.699
Coo4	Coor	0.754	CD1	CD	0.699
Lea1	Le	0.741	CD2	CD	0.729
Lea2	Le	0.800	CD3	CD	0.720
Lea3	Le	0.708	SD1	SD	0.648

should be higher than all of its cross-loadings.

4.7.1 Convergent Validity

Item	Construct	Loading	Item	Construct	Loading
Lea4	Le	0.764	SD2	SD	0.734
CFB1	CFB	0.610	SD3	SD	0.852
CFB2	CFB	0.726	AlP1	AP	0.703
CFB3	CFB	0.695	AlP2	AP	0.708
CFB4	CFB	0.707	AlP3	AP	0.764

Notes: Proactivnasses (PROAC), Coordination (Coor), Learning (Le), Structural Dimension (SD), Cognitive Dimension (CD), Trust (Tr), Culture of Family Business (CFB).

4.7.2 Discriminant Validity

The important measure to assess the instrument is the discriminant validity for the reason that "without it, researchers cannot be certain whether results confirming hypothesised structural paths are real or whether they are a result of statistical discrepancies"(A. M. Farrell, 2010, p. 324). The discriminant validity can be measured using two ways: (i) comparing the AVE, maximum shared variance (MSV) and average shared variance (ASV) Raman Kumar, Singh, and Chandel (2018), and (ii) the square root of the AVE for each construct is used (Fornell & Larcker, 1981; Manimala & Thomas, 2017). The squared AVE should be higher than the squared correlation estimates to provide good evidence of discriminant validity (Joseph F. Hair, 2010). Additional definitely, to establish acceptable discriminant validity, the elements or diagonal coefficients essential be more than the elements or off-diagonal coefficients in the columns and corresponding rows. The results in Table 20 shows that all the square roots of AVE for the constructs are bigger than the elements or off-diagonal coefficients in the columns and corresponding rows, thus, establishing evidence of discriminant validity.

Table 20 Discriminant Validity

	SD	Proac	Co	Le	CFB	Tr	PI	CD	AP
SD	**0.749**								
PRT	0.241	**0.835**							
COD	0.040	0.343	**0.747**						
LRN	0.204	0.282	0.387	**0.754**					
CFB	0.113	0.117	0.232	0.264	**0.686**				
Tr	0.306	0.111	0.024	-0.058	0.082	**0.791**			
PI	0.073	0.411	0.403	0.152	-0.037	0.109	**0.684**		
CD	0.201	-0.090	0.004	-0.074	-0.088	0.317	0.105	**0.716**	
AP	0.155	0.442	0.072	-0.059	0.051	0.051	0.473	0.155	**0.726**

Notes: Proactivnasses (PRT), Coordination (COD), Learning (Le), Structural Dimension (SD), Cognitive Dimension (CD), Trust (Tr), Culture of Family Business (CFB).

5. Conclusion

Recently, family firms have been important in market economies (Durnev, Morck, Yeung, & Zarowin, 2003). Due to the rapid change of the business environment, alliances have become significant strategic manoeuvres in businesses market (Eisenhardt & Schoonhoven, 1996). Despite the popularity of the alliance, however, it has the early termination and a high failure rate (Madhok, Keyhani, Bossink, & Vlaar, 2015). Lack of resource complementarity and capabilities are the causes of alliances failure as explanations by literature as has been explained by a number of studies. Especially in the family SMEs context, many alliances fail because of the lack of coordination, learning mechanisms and insufficient absorptive capacity (Berends, Jelinek, Reymen, & Stultiëns, 2014).

To address these gaps, the current research extends AMC literature by identifying how AMC develops the alliance performance in the family business, and how AMC developed by alliance experience, the culture of family business and political instability. This research adds to the research of RBV, family business, AMC, and Libyan context and establishes a link between resources, capabilities, and alliance performance. This is an essential contribution to existing RBV research since the empirical representation of the path between resources and performance has been missing especially in the family business. Furthermore, social capital has been examined as the moderator on the relationship between AMC and alliance performance. According to the previous literature, AMC has employed a straight-forward approach to link with firm performance (Schreiner et al. (2009) or alliance performance (Schilke & Goerzen, 2010). The study examined AMC and the antecedents, which can develop AMC such as alliance experience, the culture of family business and the political instability to gain the benefits of AMC. The result showed that AMC is relevant to gain the benefits of the alliance performance in Libyan family business. This research has also shed light on the moderating influence of social capital. The result also showed that social capital makes the relation between AMC and alliance performance much stronger.

The research adopts the quantitative method, having the collected data from the questionnaire from the Libyan family business. The questionnaire was launched using the Qualtrics platform where a unique link was sent to the participants. A total of 302 valid questionnaire responses were received, which represents an acceptable response rate (M. Saunders, P. Lewis, & A. Thornhill, 2007). The data is analysed using two-factor analysis techniques: exploratory factor analysis and confirmatory factor analysis. The results of both techniques recommend measurement of the scales, reliability and validity. Furthermore, the results of confirmatory factor analysis recommend that the model be suitable for measurement. The research findings provided support for all of propositions relationships, verifying a strong positive relationship among alliance experience and AMC. The relationship between the culture of family business and AMC

and radical the link between political instability and AMC is supported. Moreover, the results recommend that alliance management capabilities have a significant positive influence on the alliance performance. Furthermore, AMC is partially mediate the relationship between (i) alliance experience and alliance performance, (ii) political instability and alliance performance. However, it is a full mediator between the culture of family business and alliance performance. Furthermore, social capital moderates the linkage between alliance management capabilities and alliance performance.

This study nevertheless has a number of limitations despite the findings and contributions described above. First, the use of Libya as a case to examine the AMC has its perspective, the unique insight into the North African countries especially in light of the recent political disruption in the region. On another hand, the finding of the research can be limited and not generalized for the other North African countries (Bryman & Bell, 2015). This is due to the research focuses only on the context of Libya and therefore limits any comparison with other countries that do not share the language, religion, economic systems, culture, and a similar governance structure. In this study, the impact of the culture of Libyan family businesses on AMC has been studied. The culture of Libyan society in particular and the Arab community, in general, is different from Western societies. The Libyan and Arab societies are a collectivist-society, while Western societies are individual societies. However, future research is needed to be replicating this study in a different culture such as developed countries. This research is limited only to the sector of family SMEs, and the respondents were managers or owners. Therefore, replicating this study on different industries in Libya or other countries (developed or developing countries) would indeed increase the possibility of generalizing the findings and also enhanced as well as might be possible and valuable and develop the understanding of the research issues.

Second, this study examined an essential aspect of the external environment, which is the effect of the political instability on the AMC where this relationship was measured in the Libyan environment that is coupled with civil unrest and political instabilty and hence considered as a unique case. However, future research is needed to include another important element in the external environment - the technological turmoil in the market (Alexiev et al., 2016; Pratono, 2016).

Third, the Questionnaire is the primary tool for collecting data for both dependent and independent variables. To safeguard against the issue of common method bias, a number of procedural remedies were 302 incorporated when designing the survey (Podsakoff, 2003). For instance, separate scale formats were used for dependent and independent variables. The respondents had sufficient knowledge about the variables of this research. Furthermore, the imaginable influence of common method bias was evaluated using a number of statistical tests were (Podsakoff, 2003; Wingate, Sng, & Loprinzi, 2018). The results of the present research recommended that the use of common method bias is not mattered to support single informant approach, previous studies have shown that single informant approach can produce a consistent and reliable data (Podsakoff, 2003). However, the main approach limitation is that one person's reality cannot represent neither the characteristics nor the quality of the business (N. Kumar, Stern, & Anderson, 1993; Van Bruggen, Lilien, & Kacker, 2002). Future research can consider the use of multiple informants approach over the single approach even through collecting the cross-sectional data.

Finally, the research variables involved were based on a thorough review of empirical and theoretical related literature; there is an opportunity that essential variables may have been missed. Therefore, there is a chance for future study to examine and identify the influence of any missing variables. For instance, succession in the family business could be a potential variable affecting the AMC. In the family SMEs, the manager and the owner have an important role in making decisions, especially regarding the alliance, so there is a need to study how to influence decision makers on AMC.

In conclusion, the current research has extended previous knowledge by providing valuable insights into the relationship between alliance management capabilities, and alliance performance of the family business. It is significant in paving the way for additional comprehensive research on the strategic alliance. The author encourages the family business to consider and use the results of the study to their alliance project management to realise superior alliance performance.

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