# HEC MONTREAL

# THE ROLE OF PRIOR EXPERIENCES IN INFLUENCING THE ENTREPRENEURIAL BEHAVIOUR OF FOUNDERS IN ISRAEL

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# **RÉSUMÉ**

À travers le monde, des individus cherchent à apprendre d'Israël, la nation des Start-up. Malgré les probabilités statistiques relativement désavantageuses, le succès économique du pays ainsi que sa réputation pour l'innovation lui ont mérité les louanges et l'admiration de ceux qui cherche à imiter son succès. Le contexte israélien expose ses résidents à des expériences uniques tel que le récit sioniste de la nation, la réception d'immigrantes qualifiées, l'emphase sur la sécurité nationale et le service militaire obligatoire; ces expériences pourraient influencer l'inclinaison des individus vers l'entreprenariat. Cela aide à illustrer comment l'entrepreneur s'imbibe de ses contextes micro et macro et comment les résultats de ce procédé peuvent lui faire adopter des comportements considérés entrepreneuriaux. Huit entrevues avec différents entrepreneurs israéliens ont été analysés en utilisant des théories fondées. Un nombre équivalent de sources d'empreintes émergent de nos constats, avec les expériences militaires et l'immigration comme nouvelles sources. La contribution principale de cette étude fut d'étendre la théorie de l'imprégnation organisationnelle pour inclure plus d'expériences diversifiées propre au pays, offrant ainsi un aperçu de ce qui motive l'entreprenariat en Israël. Comprendre l'environnement historique, politique, social, culturel et économique au sein desquels les fondateurs opèrent peut enrichir la compréhension de ce phénomène.

**Mots-clés:** Israël, Entreprenariat, Imprégnation organisationnelle, Typologies entrepreneuriales, Service militaire, Immigration, Haute technologie

# **ABSTRACT**

Around the world, people are looking to learn from Israel as the Start-Up Nation. The country's economic success despite statistically long odds and the nation's reputation for innovation has earned her praise and admiration by all who seek to replicate her success. The Israeli context exposes individuals to unique experiences that may affect an individual's proclivity towards entrepreneurship. From the nation's Zionist narrative and reception of skilled immigrations to its emphasis on national security and compulsory military training, investigating these unique country-specific experiences serves to illustrate how the entrepreneur is imprinted and how the outcome of this imprinting process may yield behaviours deemed entrepreneurial. Interviews with eight Israeli entrepreneurs were analyzed using grounded theory. Eight relevant sources of imprint emerged from our findings, with military and immigrant experiences as new sources of imprints. The major contribution of this study was to extend theory on organizational imprinting to include more diverse and country-specific experiences thus offering a glimpse into what drives entrepreneurship in Israel. Understanding the historical, political, social, cultural and economic environment in which founders operate can enrich our understanding of the entrepreneurial process.

**Keywords:** Israel, Entrepreneurship, Organizational Imprinting, Behavioural Traits, Military, Immigration, High-Tech

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# **LIST OF ABBREVIATIONS**

AI Artificial Intelligence

BIRD Binational Industrial Research and Development

CHE The Council for Higher Education of Israel

CIA Central Intelligence Agency

COMAS College of Management Academic Studies

EO Entrepreneurial Orientation

GDP Gross Domestic Product

ICT Information Communications Technology

IDF Israel Defense Forces

IRI Industrial Research Institute
ISF Israel Science Foundation

IVC Israeli High-Tech and Venture Capital Database

MNE Multinational Enterprise
N-ACH Need for Achievement

NASDAQ National Association of Securities Dealers Automated Quotations
OCED The Organization for Economic Cooperation and Development

OCS Office of the Chief Scientist

R&D Research and Development

TECH Technology

UK United Kingdom
US United States

VC Venture Capital

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# **Chapter 1 – Introduction**

# 1.1 Phenomenon of Study

The history of Israel is comprised of unparalleled hardships. At the forefront of these hardships is the country's unceasing state of war, limited natural resource reserves and a restricted access to regional markets (Aharoni, 1998; Reich, 2008; Senor & Singer, 2009). Yet through strife and scarcity, the modern state of Israel rose from the ashes of the post-war quagmire to become a powerhouse of business and technology thus cultivating a level of resilience rarely seen in modern history. Bestowed with the label of the 'little country that could', Israel has forged a powerful melding of entrepreneurship and innovation; culminating in the pioneering of countless technological advances (Senor & Singer, 2009). Ranging from DNA computing machine systems and nanowires to groundbreaking agricultural achievements, the small nation of Israel bred creativity proportionate to its historical and environmental hardships (Chorev & Anderson, 2006; Offenhauer, 2008; Senor & Singer, 2009; Turkaspa, 2015; Bloching & Leutiger, 2015). The genesis of this global innovative pipeline did not occur in a vacuum and can be attributed to Israel's distinctive economic, political, societal and cultural circumstances that have rendered the nation an entrepreneurial force to be reckoned with (Kellerman, 2002; Senor & Singer, 2009).

Israel's image as a global innovation hub has intrigued researchers and practitioners worldwide, cementing the country's image as a promised land for entrepreneurship. Israel's economic success has been primarily ascribed to the country's investments in human capital, reception of skilled immigrants, favorable governmental policies and formation of a high-tech military defense system (Aharoni, 1998: Teubal & Kuznetsov, 2012). *The Start-Up Nation* published by Senor & Singer (2009) further calls attention to Israel's distinctive historical and cultural circumstances that have contributed to the emergence of innovative entrepreneurship. The citizen's embodiment of chutzpah – flagrant boldness –with which many Israelis drive their ideas forward and the country's high tolerance towards failure are examples of cultural traits that have permeated the DNA of the Israeli population (Senor & Singer, 2009; Teubal & Kuznetsov, 2012; Hofstede, 2017). Coupled with Israel's unique social and political narrative, these country-specific idiosyncrasies serve to exemplify contextual factors conducive to entrepreneurship in Israel that warrant further scholarly

scrutiny. Through an intensive analysis we can learn from the Israeli psyche in an effort to comprehend the ingredients to the nation's start-up success.

# 1.2 Research Objective

The main objective of this thesis is to capture a better understanding of the determinants of entrepreneurship in Israel. Specifically, this study shall attempt to shed light on the salient experiences of Israeli citizens – both native and foreign-born– that cultivate behaviors that are deemed by the literature to be entrepreneurial. The trait approach to entrepreneurship shall be adopted to evaluate the manner in which founders behave entrepreneurially. Analyzing Israeli entrepreneurs can further increase our understanding of unique sources of imprint and their subsequent impact on one's enterprising conduct. By accounting for contextual factors, a holistic view to the personality assessment of entrepreneurs shall be adopted. This approach is apposite as it attempts to capture all individual, social and cultural variables that make up the anatomy of successful entrepreneurship in Israel.

# 1.3 Research Question

What is the role of prior experiences in influencing the entrepreneurial behaviour of founders in Israel?

# 1.4 Prior Experiences

Extant research on entrepreneurship has revealed the importance of prior experiences in influencing and shaping the entrepreneurial process (Higgins, 2005; Marquis & Tilcsik, 2013; Mathias et al, 2015). Organizations and the people who constitute them are embedded and enmeshed in their environment. Founders can generate behavioural patterns by drawing on elements of their political, economic, technological, and cultural contexts by virtue of their diverse life experiences (Stinchcombe, 1965; Marquis & Tilcsik, 2013). It can subsequently influence how entrepreneurs conceptualize and respond to the world around them (Mathias et al, 2015).

Various scholars have scrutinized the importance of formative experiences by espousing imprinting theory, which postulates the significant role entrepreneurs play in selecting, incorporating and extrapolating former experiences into new settings (Stinchcombe, 1965; Boeker, 1989; Higgins, 2005). While some life experiences exert minimum influence on entrepreneurs, others can equip individuals with knowledge, attitudes, schemas and basic assumptions that can be imprinted over time onto founders. This can subsequently affect the entrepreneurial conduct and venture management of individuals (Higgins, 2005; Mathias et al, 2015; Milanov & Fernhaber, 2009). Paired with founding conditions, one's family upbringing, prior work experience and educational setting serve as widely iterated sources of imprint that can shape the behaviors, attitudes and motives of entrepreneurs (Mathias et al, 2015; Higgins, 2005; Boeker, 1989).

Imprinting forces are important to acknowledge within entrepreneurial studies as they can produce both opportunities and constraints for business founders (Higgins, 2005). These imprinting elements can also serve to determine the likelihood individuals will behave entrepreneurially and prosper in their pioneering endeavors (Mathias et al, 2015). Environmental conditions can generate longstanding consequences on the behavior of individuals including one's entrepreneurial intention as well as work-related cognition and behavior (Marquis & Tilcsik, 2013; Mathias et al, 2015). Analyzing how imprinting outcomes can prompt enterprising behavior is paramount since entrepreneurial research has acknowledged the positive influence of entrepreneurial oriented-behavior in firms, including its impact on firm survival, performance and growth (Lechner & Gudmundsson, 2014; Altinay et al, 2015).

The population of Israel undergoes certain life experiences that may affect an individual's proclivity towards entrepreneurship. From the nation's emphasis on national security and compulsive military service to the country's Zionist discourse and influx of immigrants, the Israeli context exposes individuals to unique experiences that should be acknowledged by both scholars and practitioners (Aharoni, 1998; Senor & Singer, 2009). Evaluating contextual factors and their influence on individual behaviour can help researchers understand the origin of norms, schemas and skills of early career workers and the importance of prior experiences in shaping long-lasting behaviourial patterns.

# 1.5 Entrepreneurial Ecosystem

#### **Israel**

Spanning approximately 20,770 in square kilometers, Israel's total area is only slightly larger than the US state of New Jersey (Appendix A) and its climate, courtesy of the Negev Desert, is habitually hot and arid with recurring droughts and sandstorms (CIA, 2017; Tella & Snively, 2016). As of July 2016<sup>1</sup>, the Jewish population stood at 8.17 million and the country welcomed approximately 36,000 new immigrants between 2015-2016 (CIA, 2017). Over the course of the state's brief history, the Israeli government successfully negotiated two peace treaties with Egypt and Jordan but have yet to resolve ongoing conflicts with Palestine (Bunton, 2013; United Nations, 2017). Despite regional conflicts, Israel has experienced substantial economic growth for 13 consecutive years, averaging a higher annual growth than most other OECD countries (OECD, 2016). The sustainable economic prosperity of Israel can be in part explained through gains in productivity arising from the high-tech industry.

# **Innovative Entrepreneurship**

With limited access to regional capital and natural resources, Israel has turned to technology in an effort to cultivate a prosperous nation, hence successfully capturing Ben Gurion's² image of a cultural desert oasis (Senor & Singer, 2009). The country's knowledge-based economy encompasses a high density of qualified labour and is fueled by a high level of R&D investments and ICT expenditures in manufacturing and services (Schwartz, 2006, OCED, 2015). Israel's technological industry accounts for 15.7% of the country's GDP (Sorin et al, 2016). These knowledge-based sectors include computer technology, telecommunications, biotechnology, clean technology and medical technology amongst others (Kellerman, 2002; Parad et al, 2014) Deemed a national priority, the Israeli government and the country's elite military intelligence forces raised \$581 million in funding for the country's thriving cybersecurity sector in 2016 (Startup Genome, 2017). Furthermore, Israel has more NASDAQ-listed technological companies than any other country outside of the US and China and has the highest R&D expenditure per capita in the world with over 4.25% of its GDP allocated towards research and development (OCED, 2015, Sorin et al, 2016, Startup Genome, 2017).

<sup>&</sup>lt;sup>1</sup> Most recent statistics published by the CIA (CIA, 2017).

<sup>&</sup>lt;sup>2</sup> Ben Gurion is the founder of the modern state of Israel (Bunton, 2013).

In 2014, the Global Cleantech Innovation Index identified Israel as the country most likely to develop clean technology in the next 10 years (Parad et al, 2014). Israeli companies such as Kaiima<sup>3</sup> and Emefcv<sup>4</sup> have been considered important contributors to environmental sustainability (Parad et al, 2014). The country's lack of natural resources has compelled Israeli companies to think 'outside the box' in order to survive in barren land. (Bloching & Leutiger, 2015). Forced to be creative and ingenious, Israeli companies are global leaders in desert agriculture, irrigation systems, water recycling and desalination technology, thus turning adversity into an advantage (Bloching & Leutiger, 2015). In 2017, the Global Startup Ecosystem ranked Tel Aviv the 6<sup>th</sup> topperforming start-up ecosystem in the world after Beijing and US cities (Startup Genome, 2017). Tel Aviv continually scores high in funding, talent acquisition, technology and start-up performance. The city has outperformed all other ecosystems in its ability to attract foreign customers and go global (Startup Genome, 2017). In 2015, 1400 new Israeli startups were formed and the country reported a record-breaking number of exits of over \$9 billion, 16% above 2014 (IVC, 2015). Although fewer exits were reported in 2016, venture capital funding reached a record high (IVC, 2016; Startup Genome, 2017). Israel has hence systematically paved its way as a key competitive player on the global stage through its emphasis on its high-tech industry.

# **Human Capital**

Integral to Israel's economic success is the country's investments in human capital (Tella & Snively; Senor & Singer, 2009; Kellerman, 2002). Around the world, resource-poor countries geographically removed from major markets such as Taiwan, Iceland, Ireland, and New Zealand have all leveraged their human capital as a source of competitive advantage (Isenberg, 2010). So too did Israel. Stringent local conditions and resource scarcity has forced the country to turn towards scientific and technological industries, where skilled and experienced human resources have become an important locational factor (Kellerman, 2002). A report conducted in 2015 revealed that Israel had the world's highest number of PhDs and engineers per capita (Bloching & Leutiger, 2015). Kellerman claims that Israel's devotion to R&D may be rooted in the traditional Jewish scholastic learning of the Talmud <sup>5</sup>, where literacy and analytical reasoning were

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<sup>&</sup>lt;sup>3</sup> Developed a non-GMO technology using Clean Genome Multiplication.

Visit http://www.kaiima.com/ for more information.

<sup>&</sup>lt;sup>4</sup> The company provides energy-efficient wastewater treatment.

Visit <a href="https://www.fluencecorp.com/">https://www.fluencecorp.com/</a> for more information.

<sup>&</sup>lt;sup>5</sup> The Talmud is a religious text comprised of Jewish laws (Solomon, 1996).

encouraged (2002). Modern Israel produces sophisticated defense research and, despite its small size, "is home to seven research universities, two of which rank among the world's top 50 for science" (Bloching & Leutiger, 2015: 11).

On a transnational level, Israel emphasizes the importance of solidary and interconnectivity between various global Jewish communities (Senor & Singer, 2009). The prevalence of a Jewish diaspora that transcends national boundaries is fundamental to the overarching Jewish narrative (Senor & Singer, 2009). Cooperation between Israel and its diaspora not only encourages foreign educated Jews to reinvest in their promised land, but also enables the effective mobilization and exchange of ideas in the form of 'brain circulation' thus enhancing Israel's position for global creative and cultural excellence (Senor & Singer, 2009). Furthermore, in 2015, the Israeli government has launched an initiative to allow foreign non-Jewish citizens to enter the country via an 'innovation visa' thus allowing individuals of all walks of life to participate in Israel's Silicon Wadi<sup>6</sup>. This signals a more inclusive approach to immigration, especially considering Israel's strict visa policies (Bloching & Leutiger, 2015).

#### **Brain Drain**

In an effort to restructure Israel's economy and increase the Jewish population, the state opened its doors to various immigrants across the globe (Aharoni, 1998; Kellerman, 2002; Senor & Singer, 2009). Such efforts generated additional human capital and new economic opportunities for the country. In the early 1990s, Israel received an influx of immigrants from Russia after the disintegration of the Soviet Union, with over 700,000 trained engineers and scientists entering the country by 1997. (Tella & Snively, 2001). This evidently generated an indispensable wave of talented individuals competing in the Israeli market. Immigration not only increased Israel's workforce but also the country's demand for labour (Aharoni, 1998). As noted by scholar Yair Aharoni, government policies were also favourable for immigrants: "The traumatic experience of increased emigration resulting from the recession of 1965-66 committed the government to the policy of full employment and job security [...]" (Aharoni, 1998: 130). The absorption of a large number of immigrants in the 1990s occurred during the emergence of a high-tech boom in Israel and the world over (Senor & Singer, 2009). From culture to politics, the influx of educated Jewish

<sup>&</sup>lt;sup>6</sup> Silicon Wadi is the name given to Israel's high-tech hub (Tella & Snively, 2016).

Soviet immigrants brought new entrepreneurial business models to the country, thus contributing to Israel's start-up scene.

## **High-Tech Defense System**

The Israel Defense Force (IDF)'s development of vast defense systems over the years has contributed to the emergence of Israel's information society and its growing high-tech industry (Kellerman, 2002; Aharoni, 1998). The army invests heavily in R&D for scientific advancements thus resulting in the creation of cutting-edge technology (Turkaspa, 2015). According to Kellerman, "Israel's defense has become increasingly dependent on sophisticated computer and telecommunications technologies" thus resulting in an increased demand for hiring and training engineers and scientists in the army (Kellerman, 2002: p. 273; Honig et al, 2006). Indeed, under educational programs like *Talpiot*, the IDF provides high-achieving recruits the opportunity to further their technological and scientific skills with the end goal of contributing to military R&D (Chorev & Anderson, 2006). Certain scholars and industry experts have attributed much of Israeli's high tech start-up success to the army, arguing that the military functions as an effective boot camp for start-up success (Honig et al, 2006; Senor & Singer, 2009). For instance, individuals who worked on complex algorithms and engaged in data mining in the computer unit of the IDF can transpose their knowledge to the Tel Aviv and emerging Jerusalem tech hub, where information is the new currency (Senor & Singer, 2009; Honiq et al, 2006).

A study conducted by Dr. Megiddo (2005) found notable technological spillovers from the military to commercial activities. The author analyzed how military technologies have contributed to advancements in the medical industry (Megiddo, 2005). Her findings indicate that medical imaging and computerized print systems are modern medical equipment derived from defense related research (Megiddo, 2005). Furthermore, investments in defense technology have incidentally produced talented engineers and scientists who have benefited from multi-billion dollar investments in the IDF (Honig et al, 2006). Although the rights to any intellectual property developed by army civilians belong to the IDF, the expertise and know-how acquired by these individuals can be transferred into the market (Sorin et al, 2016). The army's vital role in producing elite scientific experts can serve to explain why Arabs citizens, who are exempted from military service, have not for the most part participated in Israel's technological bandwagon (Bloching & Leutiger, 2015).

## Yozma Initiative

The Israeli government has been vital in stimulating the country's knowledge-based economy. In the 1990s, under the catalytic Yozma initiative, the government made a conscious decision to develop the country's science-based industry and kick-start venture capital (Senor & Singer, 2009; Teubal & Kuznetsov, 2012). The program aimed to foster a domestic venture capital industry, educate entrepreneurs on management skills and elevate funds (Teubal & Kuznetsov, 2012). Direct investments and substantial funds – around \$100M in governmental support– were directed to Israeli high-tech start-ups in the early phase (Teubal & Kuznetsov, 2012). The program aimed to progressively enter the private sector in order to create a self-perpetuating system. This was achieved through a contractual clause that allowed general partners to buy up to 40% of government shares at cost value in the next years following the program's inception, thus allowing government participation to be absorbed by general partners (Teubal & Kuznetsov, 2012). This privatization was achieved in 1998, merely five years after the launch of Yozma. To foster a domestic industry and promote a virtuous cycle, the Yozma program attracted MNE's, foreign investment banks and international venture capital, which led to the emergence of an entrepreneurial high-tech cluster (Teubal & Kuznetsov, 2012).

#### **Educational Aid**

Today, the government and public organizations are Israel's primary source of R&D funding (Senor & Singer, 2009; Teubal & Kuznetsov, 2012). A large amount of such funds has been directed towards university research and defense-related R&D, both of which play a vital role in Israel's overall research enterprise (Senor & Singer, 2009). The Industrial Research Institute forecasts that Israel's gross R&D spending shall comprise of 4.10% of the country's GDP in 2017 (IRI, 2017). In comparison, forecasts for US R&D stand lower at 2.783 % (IRI, 2017). With support from the government, the Israel Science Foundation (ISF) offers grants for many Israeli researchers in all academic fields to encourage innovation (ISF, 2016). In an effort to improve research cooperation with other countries, the Israeli government's Council for Higher Education supports the creation of research funds between the ISF and its foreign counterparts (CHE, 2016). For instance, a joint program between the ISF and the Natural Science Foundation of China was established with the goal of sponsoring research grants for both Israeli and Chinese researchers in fields such as physics, life science and chemistry (CHE, 2016). Certain bilateral funds have also been established conjointly with the United States such as the BIRD foundation that supports

industrial research and development (Almar, 2015). Furthermore, as aforementioned, Israel is home to special military programs that fund university tuition for promising students (Chorev & Anderson, 2006). The prestigious Talpiot program offers the opportunity for students to pursue a three-year degree in the sciences all whilst training on the field (Rae & Westlake, 2014). An additional six years of service ensues: "Not only does the program enhance the military's use of new technology, but after finishing their service some of the Talpiot participants have become prominent figures in the civilian tech start-up scene [...]" (Rae & Westlake, 2014: 11).

#### **Incubator Programs**

The Israeli government supports the nation's entrepreneurs by financing incubator and accelerator programs (Bloching & Leutiger, 2015). In 1991, the Technological Incubators Program was established to give entrepreneurs an opportunity to develop their high-tech ideas (OCS, 2010). A project in a technological incubator can obtain a budget of up to US 800,000 and spans approximately two years, during which the government assumes most of the risk (OCS, 2010). The program's main objective is to get technological ideas into the market by assisting start-ups in obtaining first round (seed-stage) investments, where promising projects can receive up to 85% financing (Bloching & Leutiger, 2015) The government also aims to create future investment opportunities well beyond the early stage and promote R&D activity (OCS, 2010). In 2016, the Israeli incubator programs have undergone administrative structuring: "[...] Programs for entrepreneurs and investors will be administered by an integrated technology authority that combines previously separate programs at the Economics Ministry and Chief Scientist' office" (Bloching & Leutiger, 2015: 13). This allows one entity to be solely devoted to all technologyrelated policies and programs in Israel thus increasing efficiency and responsiveness. Furthermore, with locations across the country, such incubators also aim to encourage minorities and immigrants to partake in Israel's start-up ecosystem (Almar, 2015).

## 1.6 Contribution

This present study contributes to academia in five critical ways. First, I shall extend theory on imprinting to encompass Israeli experiences as specific sources of imprint, thus adopting a contextualized view of entrepreneurship. Second, unlike most imprinting research that has largely focused on the organization as a unit of analysis (Marquis & Tilcsik, 2013), this thesis will investigate the imprinting process for entrepreneurs, thus demonstrating the broader implications

of imprinting. Third, I will attempt to examine how salient life experiences can have an impact on the entrepreneurial traits of individuals, thus adding to the limited academic research on entrepreneurial prior experiences to date (Audretsch, 2003). Fourth, unlike any pervious entrepreneurial research identified, this thesis will endeavor to incorporate and investigate in tandem two separate research ideas, notably entrepreneurial traits and imprinting theory. Finally, this study will attempt to shed light on Israel as the Start-up Nation, its entrepreneurial ecosystem and the unique life experiences that Israeli citizens undergo. Indeed, confronting military life, living in constant survival mode, immigrating to a new country, experiencing life in a Kibbutz, encountering a history of displacement, interacting with an engaging Jewish diaspora and finally taking part in the culture, language and traditions specific to Israel (such as Judaism, Chutzpah, and traditional scholarship, etc.) serve to illustrate the unique life and cultural experiences captured by the Israeli people that warrent further investigation (Kellerman, 2002; Reich, 2008; Senor & Singer, 2009; Almar, 2015).

# 1.7 Methodology

In an attempt to address the research question, it is paramount to select a methodological approach that would allow one to effectively analyze the past experiences of entrepreneurs. Grounded theory was selected in order to provide an authentic account and meaningful interpretation of founders living in Israel (Glaser & Strauss, 1967; Strauss & Corbin, 1990). This design strategy involves building theory within the context in which the phenomenon occurs, thus accounting for cultural sensitives. Obtaining participant experiences from their point of view within their world allows for a more holistic appraisal of entrepreneurship in the Start-Up Nation (Glaser & Strauss, 1967; Douglas, 2004). Semi-structured interviews will be conducted with Israeli entrepreneurs whereby their past experiences and present behaviours will be addressed. The content of the interviews will be analyzed thereafter along with recorded observations using an interpretive paradigm to identify important sources of imprint that exert influence on individuals. In an attempt to derive meaning from the collected data, selective coding drawn from the interviews will be used to categorize and build a theoretical analysis (Strauss & Corbin, 1990). The preliminary categories used will be derived from the literature on entrepreneurial traits. The research design is hence centered on identifying significant past experiences that would lead individuals to behave entrepreneurially. By doing so, one can better understand the role played by prior imprinted experiences in shaping current entrepreneurial behaviour.

# **Chapter 2 – Literature Review**

# 2.1 Entrepreneurship

# Importance of Entrepreneurship

Recent years have witnessed a wealth of studies arguing for the importance of entrepreneurship (Reynolds, 1999; Wennekers & Thurik, 1999; Carree & Thurik, 2003). From the mass media's popularization of successful entrepreneurs and entrepreneurship-related shows to increasing political discussions on the subject, entrepreneurship has evidently gained international appeal (Westhead & Wright, 2013). Underlying the current popularity of entrepreneurship amongst academics and practitioners is the widely-held belief that entrepreneurial activity leads to positive societal outcomes (Reynolds, 1999; Audretsch & Thurik, 2000; Kuratok, 2007). New business ventures are increasingly seen as an engine of social and economic development where entrepreneurs are can be regarded as a panacea for growth, poverty alleviation and regional prosperity (Westhead & Wright, 2013).

Scores of studies have scrutinized the role of entrepreneurship in increasing labour productivity (Reynolds, 1999; Audretsch, 2003; Van Stel & Storey, 2004). Reynolds (1999) provided preliminary empirical evidence using multiple-regression analysis suggesting that firm births and exits in the United States were positively associated with job creation. By accounting for rural differences in employment change and new firm creation in the UK, Van Stel and Storey (2004) found that entrepreneurship primarily stimulates economic growth in urban areas. Both Klette & Mathiassen (1996) and Hohti (2000) discovered employment creation to be negatively related to firm size for Norway and Sweden respectively. Similarly, Audretsch & Thurik (2001) lead a cross-country study to investigate the relationship between entrepreneurial activity and growth performance in OECD countries. The results confirm the role of entrepreneurial firms in reducing unemployment (Audretsch & Thurik, 2001). The authors also acknowledge the importance of government policies in enabling the viability of start-up firms (Audretsch & Thurik, 2001). Some studies on the other hand, such as Wagner's (1995) examination of small firms in Germany yield less compelling results. Indeed, his findings reveal that small firms are responsible for both the creation and destruction of jobs (Wagner, 1995).

Other studies have observed the role of entrepreneurship in stimulating innovation and competition (Audretsch, 2003; Jovanovic, 2001; Almeida & Kogut, 1997). Although scholars conventionally believed that a small firm's limited managerial and financial resources would stifle innovation, new studies are now acknowledging the role of new business ventures in producing technological change and innovative outputs (Audretsch, 2003: Jovanovic, 2001; Kogut & Almeida). Given that young firms are inherently more volatile and less bureaucratic, start-ups are more adaptable to our modern economy, where technologies and products become obsolete at an accelerated rate (Haltiwanger et al, 2013; Jovanovic, 2001). Indeed, Christensen (et al) argued that, "disruptive technologies are still more likely to come from start-up companies than from global conglomerates" (2001: 95). Upon examining the patent rights of small firms in the semiconductor industry, Almeida & Kogut (1997) noted that start-ups produce more innovations in emerging technological fields whilst larger firms dominate more established ones. However, some authors have questioned the relationship between patented inventions and innovations (Audretsch, 2003).

Porter (1990) maintains that innovation and entrepreneurial activity grant countries a competitive advantage. Not only can start-ups inject competition (Porter 1990; Wennekers & Thurik, 1999) and incite innovation (Schumpeter, cited in Croitoru, 2012; Link & Bozeman, 1991) (Cannon, 1985) by generating new ideas, entrepreneurial leaders can also help large corporate firms adapt, restructure, downsize and reinvent themselves through new business models and lean practices (Audretsch, 2003; Kuratko, 2007). Fulop (1991) argues that managers will be more successful in their corporate endeavors when acting entrepreneurially and exhibiting creative tendencies. Cannon (1985) claims it is beneficial for corporations and start-ups to encourage innovation and break free from bureaucratic rigidities. Start-ups that react and respond quickly to changed market condition, promote rapid communication and decision-making within the organization and delegate power and knowledge (decentralized) are considered more innovative and can even go on to create new industries (Cannon 1985). Furthermore, Kurtok (2007) claims that although the majority of start-up founders are male, the success of start-ups launched by women, minorities and immigrants has demonstrated that any individual can pursue his/her entrepreneurial dream, thus working towards equal opportunity and upward mobility (Kuratok, 2007).

# **Definition of Entrepreneurship**

The positive impact of entrepreneurship on society leads to scholarly debate on how to encourage new venture creation (Cromie, 2000). Such discussions have however been hindered by the lack of consensus on the actual meaning of entrepreneurship (Low & MacMillan, 1988; Filion, 1998; Audretsch, 2003; Seymour & Ahmad, 2008). Entrepreneurship is a multifaceted phenomenon that emerges across different disciplines and is thus difficult to define (Low & MacMillan, 1988;). Studies falling under the umbrella of entrepreneurship have pursued a broad range of research questions, motivations, objectives and have adopted different unites of analyses, theoretical perspectives and methodologies (Low & MacMillan, 1988; Audretsch, 2003). Although many definitions have been proposed over the years, this thesis will rely on the OECD's working notion of entrepreneurship, which attempts to encapsulate the various definitions suggested by the existing literature:

Entrepreneurship is about identifying and acting upon (enterprising human activity) opportunities that create value (be that economic, cultural or social). Typically, entrepreneurial activities require the leveraging of resources and capabilities through innovation, but the opportunities themselves always relate to the identification of new products, processes or markets (Seymour & Ahmad, 2008: 14).

Many discussions centered on the topic of entrepreneurship provide alternate views on the process itself (Leyden & Link, 2015). Whilst some scholars adopt a narrow view of entrepreneurial action focusing primarily on the emergence of new businesses, others provide a broader outlook that encompasses the pursuit and exploitation of opportunities irrespective of resource acquisition (Westhead & Wright, 2013). Some researchers also debate on "how entrepreneurs can utilize the resource they have at hand, while others examine the process by which entrepreneurs access and coordinate their resources" (Westhead & Wright, 2013: 6). Although it is widely accepted that the entrepreneurial process involves activities associated with the recognition and pursuit of opportunities, many authors disagree on whether the activity is a process of discovery or creation (Leyden & Link, 2015; Alvarez & Barney, 2007; Zahra, 2008). Kirzner (1976) asserts that entrepreneurs are gap-fillers who exploit market inefficiencies through arbitrage and must thus deliberately search and remain alert to new opportunities. In this view, opportunities are exogenous (Kirzner, 1976; Alvarez & Barney, 2007). On the other hand, creation theory suggests that one's accumulated experiences and knowledge can create new opportunities that would otherwise

remain unknown: "In this model, entrepreneurs do not wait for exogenous shocks to create opportunities and then provide agency to those opportunities, they act" (Alvarez & Barney, 2007:15). Zahra (2008) proposes the creation and discovery of opportunities as establishing a virtuous cycle, whereby the deliberate search for opportunities might stimulate the creation of new ones. Both theories agree, however, that it is the entrepreneur's role to produce new products and provide new services (Alvarez & Barney, 2007).

## The Entrepreneur

Academic research on entrepreneurship has revealed the importance of acknowledging the role of individuals in the entrepreneurial process (Stearns & Hills, 1996; Cromie, 2000; Chell, 2008; 2000). Identifying the entrepreneur has proven difficult as academics from diverse disciplines provide different definitions based on the premise of their respective fields (Koh, 1996; Filion, 1997; Chell, 2008). An entrepreneur's role in society is hence a matter of contention (Westhead & Wright, 2013).

#### The Economists

The term 'entrepreneur', derived from the French verb *entreprendre*, was first properly formulated by economist Richard Cantillon in 1755. Cantillon (1755) viewed the entrepreneur as a self-employed citizen who engages in high-risk activity and whose primary function is to create value. His loose economic definition of the entrepreneur encompasses not only merchants but also bakers and farmers who purchased goods and sold them at uncertain prices in the future (Cantillon, 1755: 18): "Le fermier est un entrepreneur qui promet de payer au propriétaire, pour sa ferme ou terre, une somme fixe d'argent [...] sans avoir de certitude de l'avantage qu'il tirera de cette entreprise". With the exception of lords and individuals operating on a contractual basis for landowners, in accordance with his definition, Cantillon considers every settler in the 18<sup>th</sup> century to be an entrepreneur (Cantillon, 1755). He also asserts that entrepreneurial activity creates ecosystems due to the economic effect of demand and supply. Although Cantillon's contribution is a product of its time, his definition of the entrepreneur as a reward-seeking risk-taker still bears significance today.

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<sup>&</sup>lt;sup>7</sup> The creation of a city requires a multitude of different 'entrepreneurs' that are interdependent. For instance, a new settlement will require a baker due to demand for bread, and the baker will require a carpenter to build his shop and so on and so forth (Cantillon, 1755).

Schumpeter's (1934) seminal work on the entrepreneur has had a great impact on the economist's view of the entrepreneurs with more modern implications than Cantillon (Schumpeter, 1934; Chell, 2008, Audretsch, 2003). Schumpeter first and foremost defined the entrepreneur as an innovator who (1) introduces a new good (2) opens a new market (3) improves methods of production (4) exploits new resources and/or (5) organizes new business processes (Schumpeter, 1934; Croitoru, 2012). Schumpeter clearly emphasizes the importance of innovation rather than invention is stimulating economic growth given that "as long as they are not carried into practice, inventions are economically irrelevant" (Schumpeter, 1943, cited in Croitoru, 2012). In accordance with creation theory, Schumpeter's entrepreneur creates opportunities through 'creative destruction', which refers to an innovative mechanism where outdated industries are replaced by new ones in its stead (Schumpeter, 1934; Chell, 2008). According to Chell (2008), Schumpeterian theory attributes certain personal traits to the entrepreneurial profile including creativity, intuition, tolerance of ambiguity and the power to overcome skepticism.

From an economic perspective, researchers have primarily focused on the role an entrepreneur might play in an economy and thus demonstrate little concern for the psychological aspects of entrepreneurship (Chell, 2008). Scholars such as Kirzner (1976), claim that entrepreneurs react more quickly to profit opportunities than non-enterprising individuals. He argues that due to market imperfections, entrepreneurs can seek opportunities through arbitrage (Kirzner, 1976; Chell, 2008). Whilst Schumpeter's (1934) emphasizes the importance of drastic innovation in creating new factors of production (etc), Higgins (1968) considers the entrepreneur's skills to be more organizational than scientific and defines such an individual as "a [person] who sees the opportunity for introducing the new commodity, technique, raw material or machine and brings together the necessary capital, management, labour and materials to do it" (Higgins, 1968; 150). Knight (1921) and Buchanan & Pierro (1980) both contribute to the literature by discussing the entrepreneur's ability to assume risks in conditions of uncertainty. Building on Cantillon (1755) and Schumpeter's (1934) economic view of entrepreneurship, Leibenstein argued that entrepreneurs are market coordinators and gap-fillers:

He is an individual [...] with four major characteristics: he connects different markets, he is capable of making up for marketing deficiencies, he is an input-completer, and he creates or expands time-binding, input transforming entities (i.e., firms).

(Leibenstein, 1968: 75)

Hence, according to the economist view of entrepreneurship, enterprising individuals should possess an aptitude for detecting business opportunities, coordinating resources, taking risks in conditions of uncertainty and discovering new sources of raw materials through innovative practices (Knight, 1921; Schumpeter, 1934; Leibenstein, 1968; Kirzner. 1976).

#### The Behavourists

Although cornering the definition of the economic entrepreneur is important, so too is identifying the characteristics of individuals who are disposed to act entrepreneurially (Koh, 1996; Chell, 2008; Stearns & Hills, 1996). Whilst economists are primarily concerned with the entrepreneur's functional role in an economy, scholars adopting a different perspective have attempted to understand how the entrepreneur may best be described and why certain individuals manifest superior entrepreneurial performance (Chell, 2008). Behaviorists are primarily interested in human behaviour and have thus looked at entrepreneurial characteristics rooted in psychology and sociology such as personality traits and motivational factors (Chell, 2008; Filion, 1998; Westhead & Wright, 2013: Kets de Vrie, 1977). Such theories on entrepreneurship have focused on establishing a psychological profile of the entrepreneur that is moderated by environmental conditions (Chell, 1985).

Whilst Max Weber (1947) was one of the first social scientists to theorize that entrepreneurial growth is dependent upon specific entrepreneurial behaviours that stem from the socio-cultural environment (eg. societal values, religious beliefs, etc.), David McClelland is often credited with bringing behaviourial sciences to entrepreneurial studies (McClelland,1961; Filion, 1998). In the 1960s, McClelland attempted to identify key personality characteristics needed for entrepreneurial success thus directing discussions on the topic towards the individual (McClellad, 1961). In his earlier work, he proposed that individuals endowed with achievement motivation – a drive to excel – are more likely to be entrepreneurially successful (McClelland, 1961). Later research conducted by McClelland (1987) features an investigation of other characteristics of successful small business owners such as proactiveness and self-confidence. McClelland encourages future studies to explore unconscious personality traits that drive behaviour.

# **Entrepreneurial Traits**

While founders evidently behave in a variety of ways, scholars agree that entrepreneurs possess distinct characteristics that render them different from non-entrepreneurs (Gartner, 1985; Chell,

2008). With public attention devoted towards entrepreneurial personalities like Elon Musk and Bill Gates, efforts in identifying entrepreneurial behavior are heightened (Westhead & Wright, 2013). A number of studies have attempted to select important qualities found in entrepreneurs by adopting the trait orientation and/or cognitive approach to entrepreneurial behavior (Chell 2008; Baron, 2000). Cognition theory addresses how information is used/organized and many studies adopting this approach study cognitive heuristics and biases in entrepreneurship such planning fallacies, counter-factual thinking, and over-optimism (Baron & Markman, 1999; Westhead & Wright, 2013). The trait approach to entrepreneurship, which shall be the perspective adopted for this thesis, examines personality traits in an attempt to understand who can be a successful entrepreneur (Chell, 2008; Gartner, 1988). Psychologists argue that personality traits drive individual behaviour (Furnham, 1992;). Indeed, "personality refers to stylistics consistencies in behaviour, which are a reflection of inner structure and process" (Furnham, 1992: 15). In her earlier work, Chell (1985) discusses the interaction between personality and situational factors, and argues that in tandem, these factors can generate complex behavioural patterns. Albeit not void of criticism, many scholars have adopted a trait perspective when identifying enterprising behaviour (Kets De Vries, Chell 1985; Chell 2008).

Individual particularities and diverse experiences ensure a plethora of personality types that make discussing all traits implausible (Kets De Vries, Chell 1985; Chell 2008). Behaviourists have endeavored to pinpoint reoccurring traits and themes that emerge in many successful entrepreneurs. Casson (1982) identified decision-making and good judgment as important entrepreneurial characteristics whereas Hornaday and Aboud (1971) called attention to effective leadership skills, autonomy and one's need for achievement. Using factor analysis and correlation techniques, Matthews and Oddy (1993) highlighted intellectance (intellectual interest), conscientiousness, and agreeableness as relevant traits associated with entrepreneurship (Chell, 2008). Eysenck (1967) argues for a biological basis of entrepreneurship and identifies extraversion, neuroticism and psychoticism as a three-dimensional structure of the entrepreneurial personality. Despite diverging opinions on the nature of the entrepreneur, scholars agree that entrepreneurs are individuals who establish businesses (Gartner, 1988; Cromie, 2000; Chell, 2008).

Although certain scholars have adopted a single trait approach to entrepreneurship, the entrepreneurial personality is widely considered to be a constellation of different traits (Chell, 2008). As aforementioned, given the endless list of traits mentioned in the literature review,

various scholars have narrowed it down to the characteristics that appear repeatedly in entrepreneurial research (Cromie; 2000; Thomas & Mueller, 2000). Personality characteristics that offer more positive implications such as openness and creativity are often favored over other traits such as neuroticism (Chell, 2008). Moreover, broader and more encompassing traits are often preferred in order to standardize the personality profile of entrepreneurs (Chell, 2008). Although the traits listed below do not capture a definitive description of entrepreneurs, they present a good overview of the existing literature on entrepreneurial traits. This study shall adopt a holistic view to the personality assessment of entrepreneurs by accounting for contextual behaviour.

Table 1. Common Entrepreneurial Traits in the Literature Review

Terminology
Risk-taking
propensity
Locus of control
Need for
achievement
Need for autonomy
Innovativeness
Self-confidence

Source: Adapted from Chell (2008:211)

#### Risk-Taking Propensity / Tolerance for Ambiguity

The 'liability of newness' contends that new firms face specific obstacles and exhibit lower survival rates rendering entrepreneurship a considerably risky endeavor (Stinchcombe, 1965). One must engage in high-risk projects in order to achieve firm objections despite the chance of costly failure (Miller 1983). As such, an individual's risk-taking propensity and tolerance for ambiguity has long been associated with the entrepreneurial profile (Cantillion, 1755; Leibenstein, 1968; Chell, 2008). For instance, Cantillon (1755) claimed that the entrepreneur specializes in taking risks and dealing with uncertain returns in an imperfect market. A study conducted by Begley & Boyd (1987) confirms that entrepreneurs exhibit a higher risk-taking propensity than non-entrepreneurs. Indeed, by comparing the attributes of entrepreneurs and small business managers, the authors found that venture initiators have a higher tolerance for ambiguity than non-founders

(Begley & Boyd, 1987). Cromie's (et al, 1992) findings also suggest that entrepreneurs have higher risk-taking orientations than regular managers. It is important to note, however, that successful entrepreneurs do not purposely seek risky assignments but rather take calculated and moderated risks (McClelland, 1961). Chell argues, "the propensity to take calculated risks is indicative of judgmental decision-making and is associated with the strategic behaviour of the entrepreneur" (2008: 103). On the other hand, Miner (1990) suggests that the entrepreneur is tasked with the challenge of avoiding rather than welcoming risky situations.

# Need for Achievement

Psychologist David McClelland's (1961) pioneering work on achievement motivation has led many studies to investigate the link between need for achievement and entrepreneurial behaviour (McClelland, 1961; Begley & Boyd, 1987; Chell, 2008). High achievers continuously strive to accomplish their objectives, set demanding targets for themselves, adopt a proactive forwardlooking perspective and demand rapid feedback (McClelland, 1961; Chell, 2008). Achievement motivation can thus propel an individual to high performance (Begley & Boyd, 1987). Rather than a simple drive, one's need to excel is argued to be a lifestyle choice shaped by one's past experiences (McClelland, 1961). Chell claims, "a person who is endowed with such a need will spend time considering how to do a job better or how to accomplish something important to them" (2008: 88). A study conducted by Begley & Boyd (1987) found that entrepreneurs scored higher in their need for achievement than non-entrepreneurs. Other studies, however, yield convoluted results. For instance, Cromie et al (1992) reveal that managers can be as equally driven as entrepreneurs. Westhead & Wright claim that a strong need for achievement is not the sole or best indicator of enterprising behaviour and suggest that "a broader task motivation index that considers the following as distinguish features of entrepreneurs is more insightful: self-achievement, risk taking, feedback of results, personal innovation and planning for the future" (2013: 82).

## Internal Locus of Control

An important entrepreneurial dimension often cited by scholars is locus of control (Chell, 2008). Internal locus of control refers to the perceived belief that an individual can influence and control the outcomes in their lives as opposed to being dominated by external forces (Kaufmann et al, 1995). Individuals who believe they are in charge of their lives are more likely to seek out business opportunities than those who believe they are controlled by their destiny (Cromie, 2000). That is not to say that *internals* believe that they can manipulate environmental events but rather deem

that their efforts can moderate external forces (Begley & Boyd; 1987). A cross-cultural study conducted by Thomas & Mueller (2000) found that individualistic cultures are more likely to have an internal locus of control orientation than their collectivist counterparts. This shows the importance of contextual factors in influence the entrepreneurial traits of individuals (Mueller & Thomas, 2000). Evans & Leighton's (1989) findings are consistent with the view that individuals who exhibit higher internal locus of control have a great propensity to start businesses. Both Brockhaus & Nord (1979) and Cromie et al (1992), however, failed to distinguish between the locus of control scores of managers and entrepreneurs.

# Need for Autonomy

Although many scholars consider calculated risk-taking, internal locus of control and need for achievement as key entrepreneurial traits, other have also viewed autonomy as an important characteristic (Chell, 2008; Utsch et al, 1999; Shane et al, 1991). Using Blackburn and Curran's (1993) notion of 'fortress enterprise', Chell aptly identified the need for independence as "a tendency as it were [to] batten down the hatches against external interference, influence and intervention" (Chell, 2008: 133; Blackburn & Curran, 1993). Along with financial gain, many entrepreneurs state independence and the desire for job freedom as key motives for entrepreneurship (Shane et al, 1991; Birley & Westhead, 1994). As such, personal control and freedom of choice can prompt entrepreneurial-oriented behaviour. Both Utsch et al (1999) and Cromie et al (1992) found that entrepreneurs have a greater need for autonomy than nonentrepreneurs. Sexton and Bowman (1985) uncovered evidence suggesting that entrepreneurs have a lower need for conformity and are thereby more self-reliant and independent than the general populous. Cromie (2000) contends that entrepreneurs want to assume control over their lives and thus "prefer to avoid the restrictions imposed by rules, procedures and social norms" (2000: 21) that can hinder creativity. Along with proactiveness, risk-taking and aggressiveness, Lumpkin and Dess (1996) have included autonomy as an important entrepreneurial-oriented attribute that leads to the creation and exploitation of new opportunities.

#### Innovativeness/Creativity

Innovation is another characteristic often attributed to entrepreneurs. Schumpeter maintains that entrepreneurs create business opportunities through innovative practices (Schumpeter,1934). Building on Schumpeter's theory of creative destruction, many economists have associated entrepreneurship with innovation (Lumpkin & Dess, 1996; Filion, 1998; Chell, 2008).

Innovativeness involves a strong organizational commitment to "engage in and support new ideas, novelty experimentation and creative processes that may result in new products, services or technological processes" (Lumpkin & Dess, 1996: 142). Engaging in product-market innovation requires imagination, experimentation, trial and error and lateral thinking (Cromie, 2000). Many researchers have considered creativity to be innovation at the firm-level, scholars adopting a psychological perspective argue that creativity "requires entrepreneurs to integrate knowledge and ideas from diverse sources" (Chell, 2008: 166), where individuals draw on domain-related knowledge, relevant skills and task motivation to see problems in new and unconventional ways in an attempt to overcome resource barriers (Fillis & Rentschler, 2010). Hence, successful innovation occurs when an overlap between resources, techniques and motivation occurs (Amabile, 1988).

An innovative entrepreneur is one that is alert, creative, flexible, intuitive (yet logical) and shows a preference for counter-factual thinking (Young, 1985; Chell, 2008). Such individuals also maintain strong ties to their environment. Innovative individuals who proactively search for information and seek new ideas are more likely to discover and exploit opportunities (Westhead & Wright, 2013). Creative individuals are above all intrinsically motivated to actualize their potential (Young, 1985; Amabile, 1988; Chell, 2008). A study conducted Woodman et al (1993) found that antecedent conditions such as one's personal history and past reinforcement can influence one's creative abilities. Furthermore, creative individuals are considered to be forward thinkers yet also look to the past for inspiration and the discovery of new opportunities (Young, 1985). Indeed, past ideas can be reformulated and revitalized to create new product and services in an organization (Amabile, 1988). Moreover, Kirton's (1976) adaption-innovation theory suggests that adapters and innovators can produce organizational change, hence maintaining that both can engage in creative processes. Adapters methodologically improve existing ideas whereas innovators attempt to do things differently and challenge the status quo (Kirton, 1976). As such, although many scholars treat creativity and innovativeness as interchangeable concepts, some scholars recognize the different between the two (Kirtin, 1976; Chell, 2008). Finally, Duxbury (2012) argues that creative personality traits will differ depending on the organizational context and how well the entrepreneur synergizes with his team.

Self-confidence is an important characteristic of successful entrepreneurs (Koh, 1996; Chell, 2008). Given that new business venture are fraught with high-stakes risk, entrepreneurs must have the confidence to tread the precarious path ahead (Chell, 2008). Self-confidence entails amongst other things the trust in one's own knowledge, personal capabilities and judgment as well as in the one's ability to sell oneself (Chell, 2008). Self-confidence is often linked with optimism, self-efficacy and one's internal locus of control (Cromie, 2000). Kirkwood (2009) argues that a lack of confidence can hinder female entrepreneurs. Indeed, in an attempt to overcome their lack of confidence, female founders collaborate with individuals that appear to have a high self-esteem (Kirkwood, 2009). On the other hand, Hayward et al (2006) argue that over-confidence is detrimental to the opportunity recognition and resource allocation of founders. After all, overconfident individuals are prone to overestimation and self-deception (Hayward et al, 2006). However, the authors also conclude, that "over-confidence might help founder attract greater resources, especially from impressionable stakeholders" (2006:170). Finally, Cromie (2000) suggests that self-confidence may be an outcome rather than a determinant of entrepreneurship.

# 2.2 Contextualizing Entrepreneurship

#### **National Culture**

Adopting a contextualized view of entrepreneurship has obtained growing recognition among academics in recent years (Lumpkin & Dess, 1996; Welter, 2011). A strand of literature has attempted to contextualize entrepreneurship by accounting for national variations. Many studies have sought to observe the effect of local culture on entrepreneurial activities (Shane et al, 1991; Kreiser & Davis, 2010; Baum et al, 1993; Thomas & Meller, 2000). A study conducted by Shane, Kolvereid & Westhead (1991) observed national differences in reasons for new business formation when comparing British, Norwegian and New Zealand entrepreneurs. Their results indicate that obtaining recognition and achieving a higher position in society is a strong reason for establishing a start-up in New Zealand and Great Britain (Shane et al, 1991). Norwegian venture initiators, on the other hand, are more likely to establish a start-up to develop an idea. With the exception of job freedom, all three countries had different reasons for establishing new business ventures (Shane et al, 1991). Kreiser & Davis (2010) investigated the impact of culture on the entrepreneurial

orientation of SMES and asserted that national culture directly affects the organizational risk-taking and proactive enterprising behavior of firms. Finally, Hofstede's cultural dimensions confirm the role of culture in influencing the needs and attitudes of managers and entrepreneurs (Hofstede, 1980). McGrath et al (1992) have demonstrated however that regardless of culture variations, entrepreneurs behave differently than non-entrepreneurs.

## Cultural Variations in Entrepreneurial Traits

Although research has shown that entrepreneurs share universal traits that transcend cultures (McGrath & Macmillan, 1991), numerous scholars encourage the literature to acknowledge the cultural and social background of entrepreneurs when attempting to explain and predict entrepreneurial behavior (Kreiser & Davis, 2010; Hayton et al., 2002). Thomas & Meller (2000) argue that culture can influence the development of entrepreneurial potential. Using a multiple regression analysis, the authors sampled business students in nine different countries and concluded that certain entrepreneurial traits like one's internal locus of control and risk-taking propensity may in fact be culture-specific (Mueller & Thomas, 2000). Baum et al (1993) reported entrepreneurial differences among the motivation and behavior of Israeli and US entrepreneurs. Israeli entrepreneurs appear to have a higher need for affiliation, autonomy and achievement than their US counterparts (Baum et al, 1993). The authors contend that "each culture develops and reinforces different profiles of individuals occupying distinct work roles [...] [and] over time, these profiles attract different types of individuals into these roles (Baum et al, 1993: 507)." Chell (2008) notes that the American culture is more achievement oriented than other Western capitalist cultures. In comparison, negative attitudes towards self-employment and 'high achievers' in Britain have curtailed achievement motivation amongst English entrepreneurs (Chell, 2008). Upon discussing the interaction between culture and personality, Zhao & Seibert argue, "behaviour that is consistent with cultural values will be more acceptable and therefore more likely to be exhibited than behaviour that clashes with cultural values" (2006: 262). Finally, Lee (1999) noted that different societies can generate different type of entrepreneurial dimensions thus also demonstrating that entrepreneurs are endowed with characteristics that are time and location specific. Lee argues that Asian entrepreneurs are less tolerant towards uncertainty than their western counterparts since Asian society as a whole associates failure with the loss of face (Lee, 1999). Hence, the regional culture that is already highly intolerant towards failure evidently influences the entrepreneurs

therein. Literature on entrepreneurship hence reveals that culture evidently impacts the behavior, attitudes and perceptions of entrepreneurs and may be either the cause or effects of personality.

#### **Social Processes**

Scholars are now increasingly acknowledging the importance of substantive economic behavior that encompasses historical, institutional, temporal and social contexts to better address diverse entrepreneurial phenomena (Welter, 2011; Zahra et al, 2014). As argued by Welter (2011), exploring contexts and their impact on entrepreneurship can shed light on when, how and why entrepreneurship happens and the actors involved. Lumpkin and Dess (1996) have suggested that future field research should shed insight on how social processes may be associated with entrepreneurship (Lumpkin & Dess, 1996). Despite academic debate as to whether entrepreneurs are born or made, various scholars acknowledge the role of social and career contexts in shaping an individual's propensity to act entrepreneurially (Gibb & Ritchie, 1982; Aldrich & Cliff, 2003; Elert et al, 2015). Entrepreneurship as a social process is expounded by Gibb and Ritchie (1982:28): "The individual is developed by transactions with other individuals and groups in his on-going social life." The authors recognize the importance of class structures, family composition, parental background, occupational choice, education, social attachments and current lifestyle in influencing entrepreneurial behavior (Gibb & Ritchie, 1982).

Key social context dimensions can shape an individual's attitudes and resources needed to engage in the entrepreneurial process (Gibb & Ritchie, 1982; Aldrich & Cliff, 2003). Some contextual studies look at opportunity recognition through social networks (Fletcher, 2006) whilst others explore the long-term effects of education on entrepreneurial performance (Elert et al, 2015). Aldrich & Cliff (2003) confirm the significant role of families in influencing the decision-making process and opportunity recognition of entrepreneurs. Indeed, families profoundly shape the norms, attitudes and values of entrepreneurs as well as their available resources (Aldrich & Cliff, 2003). Such familial influences can heighten or constrain an individual's entrepreneurial endeavors such as their launch decision, resource mobilization and founding strategies (Aldrich & Cliff, 2003). This growing research interest that extends beyond prescriptive literature has led many articles to contextualize the phenomenon and delve into its social roots. Analyzing one's prior experience can shed insight on key social processes such as one's family upbringing and education that may influence entrepreneurial behavior.

# **Prior Experiences**

Analyzing how past experiences can prompt entrepreneurial-oriented behavior is of essence in predicting an individual's entrepreneurial intentions as well as the success and performance of newly established business ventures. The role of formative experiences in influencing entrepreneurial behavior has attracted scholarly attention in diverse disciplines including career research (Higgins, 2005), educational research (Davidsson & Honig, 2003) and institutional theory (Dokko et al. 2009). Higgins scrutinizes the role of previous career experiences in shaping entrepreneurial leaders (Higgins, 2005). She argues that one's former occupation can influence the future job performance and work style of individuals (Higgins, 2005). For instance, she observes that military veterans who enter a new organization are driven by the status quo and thereby lack flexibility (Higgins, 2005). This demonstrates that although career experiences can produce opportunities for individuals in the form of relevant skills, it may also constrain the entrepreneur (Higgins, 2005). Davidsson & Honiq (2003) found that whilst formal education did not appear to increase the entrepreneurial activity of individuals, nascent entrepreneurs who have taken business classes demonstrated increased proclivity for entrepreneurship (Davidsson & Honig, 2003). A recent contribution to literature focuses on the past experiences of entrepreneurs as it relates to the decision-making process and opportunity recognition of individuals (Mathias et al, 2015). The findings indicate that entrepreneurial intention is imprinted on individuals in early life through friends and family. This increases the likelihood that individuals will exhibit entrepreneurial behavior later in life (Mathias et al, 2015). Past experiences can influence an entrepreneur's motivation to pursue different opportunities and can thereby impact how an individual perceives different business prospects (Mathias et al, 2015). Robinson et al (1991) argues that past experiences can be reevaluated to yield new attitudes toward entrepreneurship. Finally, habitual entrepreneurs can learn from their past start-up experiences to adjust the manner in which they detect and exploit opportunities (Westhead & Wright, 2013).

#### Imprinting Theory

Arthur L. Stinchcombe is often credited with introducing the notion of organizational imprinting in the 1960s by discussing the relationship between the social structure of society and the internal life of the firm (Stinchcombe, 1965). He noted that basic features of an organization vary with the time of founding hence positing that, "organizations which are founded at a particular time must construct their social systems with the social resources available" (Stinchcombe, 1965:

169). By comparing the US textile industry that emerged in the nineteenth century with the automobile industry of the twentieth century, Stinchcombe aimed to demonstrate that founding conditions could impinge on the organizational structure of a firm, thus influencing its future trajectory (Stinchcombe, 1965). According to Stinchcombe, a firm in its early development phase is highly dependent on its environment for resources and information. Indeed, young firms experience a 'liability of newness' and are thus more likely to draw upon elements of their environment due to their lack of legitimacy and their limited managerial and financial resources (Stinchcombe, 1965). Hence, Stinchcombe contends that firms mainly differ due to the specific resources available during a company's inception. His theory on organizational imprinting serves to explain why organizations and industries who originated from the same historical period appear to behave in a similar fashion. Although Stinchcombe did not corner the term *organizational imprinting* per se, his seminal essay *Social Structures and Organizations* is often referenced as being the first published work to illustrate the phenomenon thus establishing foundations for future research.

The majority of the literature building on Stinchcombe's insights has focused on the organization as the preferred unit of analysis (Marquis & Tilcsik, 2013). Indeed, scores of studies have attempted to empirically prove Stinchcombe's hypothesis by analyzing how firms take on elements of their founding environment (Kimberly, 1975; Boeker, 1989; Schein, 1983). A growing number of researchers are now attempting to understand how early experiences can have a lasting effect on individuals rather than the firm (Schoar & Zuo, 2017; Dokko et al, 2009: Azoulay et al, 2017). Schoar & Zuo (2017) for example sought to understand how previous macroeconomic conditions influence individual behavior. The authors noted that the economic environment at the beginning of a manager's career has an impact on the individual's subsequent behaviour (Schoar & Zuo, 2017). Indeed, managers that experienced a recession during their early career adopted more conservative strategies in the long run (Schoar & Zuo, 2017). Another study observed the role of institutions in influencing individual behaviour by examining the relationship between prior work experiences and current job performance (Dokko et al, 2009). The results reveal that prior experiences may produce both opportunities and constraints for individuals (Dokko et al. 2009). Indeed, whilst workers can incorporate relevant skills into the new enterprise, they also embed cultural paradigms and patterns of basic assumptions drawn from previous occupational engagements (Dokko et al, 2009). Finally, Azoulay et al (2017) examined how early career advisors and peers socially influence the decision-making process, beliefs and behaviours of trainees.

Popular sources of imprint typically examined by researchers at the individual level include one's educational background, professional/mentoring experience, and family upbringing as well as one's technological inclination and preferred hobbies (Mathias et al, 2015; Higgins, 2005; Boeker, 1989). To summarize, certain elements of the past that occur during sensitive periods of one's life can be inscribed into the present thereby affecting future outcomes. For the intended objective of this thesis, the aforementioned sensitive period of transition refers to the individual's new venture initiation. Indeed, scholars have identified new business ventures, and their founders thereof, as highly susceptible to external forces (Stinchcombe; 1965; Johnson, 2007; Marquis & Tilcsik; Mathias et al, 2014).

# 2.3 The Israeli Experience

# **National Security**

Building a flourishing Jewish nation amidst surrounding hostile states has had a profound impact on Israel's collective psyche (Aharoni, 1998; Senor & Singer, 2009). Indeed, "[...] many Israelis still feel that the nation is under siege, to which the response must be constant vigilance (Aharoni, 1998: 130)." Social cohesion within Israel is hence a result of the outside threats plaguing the region. National security is such a constant and permeating part of Israeli society that it serves as a constant reminder of the importance of building a thriving Jewish nation based on accountability, collectivity, solidarity, and sacrifice (Sasson-Levy, 2008). Israel's high defense costs comprised of 5.4 percent of the country's gross domestic product (GDP) in 2015 and although this number has dramatically decreased in the last two decades<sup>8</sup>, it is still 3.1% higher than the global average military expenditure (Worldbank, 2016). As such, it is evident that the Israeli Defense Force has an impact on the country's balance of payments due to considerable military spending. It also affects the country's allocation of manpower owing to the large recruitment of combat personnel (Aharoni, 1998). Being one of the country's most prominent institutions, the army evidently influences the country's economy, political rhetoric and cultural norms.

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<sup>&</sup>lt;sup>8</sup> In 1988, Israel's high defense costs comprised of 17.1 % of the country's GDP. When the Cold War ended and Israel established peace treaties with Jordan and Egypt, military spending decreased in Israel (Worldbank, 2016).

## Israeli Defense Force

The Israeli army differs from most armed forces worldwide due to its mandatory conscription of all men and women for the duration of 2-3 years, with a few minor exceptions including Hassidism Jews and certain Arab communities who are exempted from service (Almar, 2015). Every year, countless of young Israelis are recruited into the army at the young age of eighteen and hence all Israeli university students have served the IDF prior to pursuing their studies. The Israeli Defense Force (IDF) is considered unique due to its flattened hierarchical nature, its high level of techno-tactical achievements and its tendency to encourage improvisation and reward initiative (Senor & Singer, 2009; Adamsky, 2010). Regardless of rank and one's economic and demographic status in society, rookie soldiers and veterans alike are driven to challenge authority and question their peers (Senor & Singer, 2009; Adamsky, 2010). Indeed, "normally, when one thinks of military culture, one thinks of strict hierarchies, unwavering obedience to superiors, and an acceptance of the fact that each soldier is but a small, uninformed cog in a big wheel. But the IDF doesn't fit that description" (Senor & Singer, 2009: 34). Whether on the field or working in a technological unit, micromanaging is discouraged in the IDF in an effort to promote innate decision-making skills and foster autonomy (Senor & Singer, 2009). This is exemplified by the fact that the IDF deliberately recruits more lieutenants than colonels in an attempt to understaff senior level positions thus valuing a bottom-up approach which differs drastically from most of the world's top heavy armies (Senor & Singer, 2011).

Israel's citizens are cast onto their nation's front lines, made to fight for the greater good of the country in its quest for recognition. During this mandatory service period, men and women are violently thrust out of their comfort zones, forced to adapt to a whole new lifestyle centered around discipline, survival and self-improvement (Senor & Singer, 2011). According to Israel experts Senor & Singer, young Israeli trainees acquire the confidence and assertiveness to undertake bigger challenges in their future careers. The challenges these recruits face allow them to develop impressive leadership and interpersonal skills – essential tools in military life. (Almar, 2015). The close bonds these soldiers establish manifest themselves as an integral social network. (Swed & Butler, 2015). According to Swed and Butler (2015), the "association between military service and personal relations is considered strong among Israelis. Over 70 percent of the general population believes military service contributes to personal connections" (Swed & Butler, 2005: 133). The camaraderie forged through military service is often maintained long afterward, materializing into

post-military partnerships and business ventures between former brothers in arms (Swed & Butler, 2005; Senor & Singer, 2011). The compulsory service essentially acts as socialization process and has proven to be an invaluable building block for Israeli society as a whole.

### **Immigration**

For nearly 3000 years after the dispersion of the Jews in the Diaspora during the Roman Siege of Jerusalem, the Jewish people yearned to return to their 'promised' land (Reich, 2008). In 1948, the establishment of the state of Israel effectively realized the age-old dream of a united homeland where its citizens could collectively build the nation of tomorrow (Reich, 2008). Today, Israel as a Jewish state has welcomed immigrants from over 100 countries and is home to a variety of subcultures including but not limited to Ethiopian Jews, Russian Jews, Ultra-Orthodox Jews, and Arabs Jews (Reich, 2008). A report published by the OECD in 2012 revealed that 43% of households in Israel include an immigrant in comparison to less than 10% in most central European countries. According to the country's Law of Return, every Jew is given the right to settle in Israel and claim citizenship (Ernst, 2009). Stripped from their wealth and home, immigrants are aggressive risk-takers who have relocated with little to lose and limited options (Senor & Singer, 2009). Some individuals have trekked the desert barefoot to reach Israel from Ethiopia whilst others left Russia during the Cold War in pursuit of their ideological beliefs (Senor & Singer, 2009). Powered by one's need to survive, immigrants who must start anew do not remain complacent in their respective comfort zones but rather seek to improve their existing conditions: "[...] If you're an immigrant in a new place, and you're poor, [...] or you were once rich and your family was stripped of its wealth – then you have a drive" (Senor & Singer, 2009: 128). Immigrants thereby experience a unique set of circumstances including displacement, adapting to a new context, unemployment and segregation.

### **Kibbutzim**

Israel's start-up success story resulted in a shift in the country's national narrative from Kibbutzim and Moshavim to its capitalist reality of today (Carmel, 2015; Reich, 2008; Tella & Snively, 2016). The Israeli people have undergone important social and economic changes that have gradually transformed the country into a relatively free market economy (Aharoni, 1998). Despite the dismantling of Kibbutzim, a small percentage of Israeli citizens predominantly from

<sup>&</sup>lt;sup>9</sup> Who can be considered a 'Jew' is another debate entirely.

farming families still reside in such collective communities (Senor & Singer, 2009). The Kibbutzim movement that emerged in the 1930s defined the Israeli utopian way of life for years (Leviatan et al, 1998). The Kibbutz is an agricultural settlement characterized by a collective community lifestyle that promotes cooperation and discourages competition (Russell et al, 2013). As a socialist commune, the kibbutzim share assets and property as well as responsibilities and are hyperdemocratic: "Every question of self-governance, from what crop to grow to whether members would have televisions, was endlessly debated" (Senor & Singer, 2009: 69). Albeit controversial, children were traditionally brought up by the community rather than raised by their parents (Russell et al, 2013, Senor & Singer, 2009). Although many practices were halted, some modern kibbutz still emphasize the socialist way of life. However, many surviving communal settlements have adopted capitalist arrangements, some going as far as investing in promising new ventures or operating as accelerators for start-up projects (Shamah, 2015; Schuster, 2016). Today the Kibbutz, despite its small population, still makes significant contributions to the Israeli economy: "[...] at less than 2 percent of Israel's population, kibbutzniks produce 12 percent of the nation's exports." (Senor & Singer, 2009: 69). Although prominent start-up companies like Waze and *Mobileye* have redefined the Israeli identity, the Jewish population acknowledges the legacy of the kibbutzim and its connection with the Zionist movement (Shamah, 2015; Senor & Singer, 2009). Whilst the majority of citizens no longer partake in communal living, every year through volunteering programs or summer Zionist camps, countless of Israelis manage to experience this unique socialist way of life (Almar, 2015).

### 2.4 Literature Gap

Despite burgeoning academic interest on the topic, much research on imprinting and prior experiences of entrepreneurs remains unexplored (Marquis & Tilcsik, 2013). For one, little attention has been allotted to Middle Eastern entities bearing the imprint. Prior studies have mostly sought to investigate the phenomena at different levels of analysis by observing US and European industries, organizations and managers (Schein, 1983; Boeker, 1989; Higgins, 2005; Marquis & Tilcsik, 2013). Building the theory on Western experiences does not provide a comprehensive view of imprinting, as it does not encompass diverse country-specific experiences that may affect our understanding of entrepreneurs. For instance, US studies have speculated that army servicemen are driven by the status quo (Higgins, 2005). In Israel, however, it would appear that veterans can develop specific entrepreneurial characteristics, by which creative and flexible processes are

encouraged, that can generate strong leadership skills (Senor & Singer, 2009). Hence, as argued by Welter (2011), more studies should examine the contextual determinants behind entrepreneurship and entrepreneurial related traits. Shedding insight on the unique experiences of Israeli citizens is relevant for western scholars as "we are likely to better 'see' the importance of context in examples from context we are not familiar with than in examples from context we take for granted" (Welter, 2011: 166). Analyzing the entrepreneur in his/her environment can help explain rather than document the entrepreneurial process (Low & MacMillan, 1988). Whilst many scholars have acknowledged the importance of formative experiences in shaping entrepreneurs, little has been revealed about how these experiences can cultivate specific traits conducive to entrepreneurship (Chell, 2008; Marquis & Tilcsik, 2013). Analyzing the micro and macro level influences of entrepreneurs can reveal how individuals imprint onto their environment and develop behaviourial patterns that enable them to take meaningful decisions in the pursuit of new opportunities (Chell, 2008).

## Chapter 3 – Methodology

## 3.1 Research Design

### **Grounded Theory**

The objective of this thesis was to extend theory on organizational imprinting to include country-specific experiences and entrepreneurial typologies. More specifically, the aim was to analyze the role of prior experiences in influencing the entrepreneurial behaviour of founders living in Israel. By taking into account the research question, current literature on the topic and intended theoretical contributions, an inductive qualitative approach was determined to be a good methodological fit for this study. Grounded theory, which argues for the discovery of theory from data that allows for more meaningful interpretations, was employed to give an adequate account of the participant's experiences and make sense of their environment (Glaser & Strauss, 1967). This approach is considered appropriate for social and behavioural research as it seeks to understand contextual sensitives through the iterative discovery and comparison of substantive data emerging from the observed phenomena (Strauss & Corbin, 1990). It attempts to convey a conceptual understanding of empirical evidence and provides researchers with the necessary guidelines on how to identify and refine categories all whilst establishing relationships between them (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Grounded theorists interact with the data by asking questions in hopes of yielding compelling answers (Glaser & Strauss 1967; Strauss & Corbin, 1990). This methodological approach often requires researchers to return to the source and collect additional data in an effort to validate emerging themes.

When attempting to study a phenomenon like entrepreneurship, it is important for researchers to acknowledge entrepreneurs as knowledgeable agents, as one can seek to learn from their thoughts, feelings and behaviours (Gioia et al, 2012). As such, instead of imposing existing constructs, one can build or extend theories through sense-making in order to better understand how and why entrepreneurship happens (Glaser & Strauss, 1967; Strauss & Corbin, 1990). This study specifically attempts to bridge the gaps and oversights found in organizational imprinting theory and the study of entrepreneurial traits (Chell, 2008; Marquis & Tilcsik, 2013). Through inductive reasoning, overt observations were first recorded followed by semi-structured interviews, where general data gathered from pilot findings were categorized into emerging themes (Strauss

& Corbin, 1967). Tentative propositions were formulated from detected patterns in the data and follow-up emails and interviews with the participants served to refine existing categories and address emerging questions. Finally, general conclusions were developed using theory obtained in the literature review.

### 3.2 Context and Sample

#### Context

In order to investigate the impact of prior experiences on entrepreneurs, I selected a country where entrepreneurship is rife and where individuals are exposed to life experiences and cultural norms that are different from those encountered in western countries (Aharoni, 1998; Senor & Singer, 2009). I selected Israel as a case study as little attention has been allotted to contextualizing entrepreneurship in the Middle East, especially with regards to the past experience of Jewish entrepreneurs (Marquis & Tilcisk, 2013; Audretsch, 2003). Israel's *Silicon Wadi* has intrigued business worldwide, imploring researchers to investigate the social and environmental ingredients to its success (Senor & Singer, 2009; Bloching & Leutiger, 2015; Tella & Snively, 2016). The Start-Up Nation's unique circumstances and life experiences, from its Zionistic historical narrative to its modern high-tech defense system (Aharoni, 1998), can help researchers obtain a richer understanding of the imprinting phenomenon. Indeed, unique sources of imprint can demonstrate the power of personal narratives and reveal the role of transformative experiences in generating entrepreneurial traits. Incorporating extreme and distinctive cases can "facilitate theory-building because the dynamics being examined tend to be more visible than they might be in other contexts" (Pratt et al, 2006: 238; Eisenhardt, 1989).

### Sample

My sample consisted of 8 entrepreneurs living in Israel. These entrepreneurs are characterized as having recently established a new business venture as well as having a substantial say in the current affairs of their business (Audretsch, 2003; Westhead & Wright, 2013). As differences in prior experiences can yield different sources of imprint (Boeker,1989), I sought to include both male and female respondents from different age groups. In order to conduct a realistic appraisal of life in Israel, I have also decided to include both Israeli and foreign-born entrepreneurs in my sample. This is due to the fact that Israel is home to many *olim hadashim* – new immigrants

(Cheyette & Marcus, 1998). Indeed, given that about half of Israeli households include an immigrant (OCED, 2012), I endeavored to incorporate the prior experiences of newcomers in my sample in order to properly portray the Israeli context. My sample consisted of two entrepreneurs in the tourism industry and six in high-tech. The entrepreneurs in the high-tech industry developed either an application, platform or software in a variety of different industries including healthcare and entertainment. However, given the small sample size, comparisons between industries were limited. Finally, all of the respondents identified as Jewish. Despite the aforementioned criteria, I acknowledge the use of convenience sampling whereby some respondents were selected simply because they were willing to participate in an interview and were thus readily available. However, the sample reflects well enough the larger population of Jewish entrepreneurs in Israel. Hence this context and sample grants me the opportunity to study the prior experiences of entrepreneurs living in Israel.

### 3.3 Data Collection

#### **Overt Observations**

The first step in my data collection process involved observing a phenomenon and formulating a broad research question. In 2015, under the supervision of HEC Montreal, I participated in the Campus Abroad program located in Israel and hence had the opportunity to observe Israeli entrepreneurs in their natural environment. My role as a researcher involved recording direct observations, engaging in collective discussions and workshops on entrepreneurship at COMAS university, and visiting approximately 10-15 Israeli start-ups including Mobileye, Tracx and Shiftech (Appendix B). Observations were logged daily in a journal and were conducting over a period of three weeks. The subjects were made aware of my research intentions <sup>10</sup>.

This early stage of obtaining broad knowledge on entrepreneurship in Israel required a flexible attitude in order to properly investigate the real world without a preconceived hypothesis (Strauss & Corbin, 1967). The objective was to observe a phenomenon in its natural setting and derive a research question from my recorded observations. Getting close to the data, interacting with Israeli entrepreneurs and obtaining broad knowledge on the Start-Up Nation allowed me to inquire about

 $<sup>^{10}</sup>$  The subjects were aware that HEC students would be observing them and taking notes. The students were permitted to ask questions.

the unique experience of entrepreneurs in Israel. In accordance with HEC's ethical guidelines, the recorded observations were not incorporated in the findings but have rather been treated as class notes. They serve their purpose in formulating a research question and providing insights in the discussion section.

#### **Open-ended Interviews**

In an attempt to address the research question, it was paramount to select a data collection strategy that would allow to best identify imprinted past experiences that occur at the founding phase. Specifically, I sought to understand *how* these experiences can influence specific behaviours in the long term. As such, I conducted semi-structured interviews whereby the past experiences and present behaviour of the entrepreneurs were analyzed in a detailed manner. I deemed interviews appropriate for developing grounded theory as the purpose of an in-depth interrogation is "to understand the lived experience of other people and the meaning they make of that experience" (Seidman, 2006: 9). Hence, developing a relationship with an interviewee and listening to his/her story does not involve testing a hypothesis but rather engaging in sense-making and assessing different perspectives (Seidmen, 2006; Gioia et al, 2012).

I selected the entrepreneur as the unit of analysis as prior research has mainly focused on imprinting at the level of the organization (Marquis & Tilcisk, 2013). 8 participants were interviewed (Table 2) using open-ended semi-structured interviews that lasted between twentyfive minutes to an hour depending on the entrepreneur's schedule. Notes were taken during the interviews to record initial observations and allow for better data extraction. Some of the interviewees were recruited through Israeli acquaintances and others were contacted through Jewish entrepreneurship forums. Due to time and resource limitations, the interviews could not be held face-to-face but were rather conducted through a video-conferencing meeting. I demanded to obtain informed consent for participation in my research project prior to starting the interview. Following Seidman's (2006) advice, I began the conversation with broad questions such as "Can you tell me a little bit about yourself?" and "Can you describe your current start-up project?" (Appendix C). These questions were meant to establish an initial rapport with the interviewees and understand their entrepreneurial endeavors. I also inquired about the entrepreneur's strengths and weakness in order to obtain more information on their personality. As the interview progressed, I began to ask specific questions relating to an entrepreneur's prior experiences and often encouraged further elaboration and clarification on their responses. Towards the end of the interview, important themes began to surface that were useful for my data analysis (Strauss & Corbin, 1990). Follow-up emails and interviews were at times necessary to seek clarification on certain questions, confirm data interpretations and obtain additional information (Seidmen, 2006).

Since my interviews were semi-structured, I was flexible with the direction of the conversation. Although I had a pre-determined set of possible questions, my task was first and foremost to let the entrepreneur tell his/her story (Gioia et al, 2012: 17). As such, if participants mentioned an experience in passing and did not seem very forthcoming with that information, I deemed that the experience was perhaps less influential and thus not as important to the entrepreneur. Given that I am investigating sources of influence in the form of imprints, it is important to understand the degree to which an entrepreneur considers his/her experiences to be valuable. This is due to the fact that experiences that are not imprinted onto the entrepreneur will not exert a lasting effect and are thus not relevant to my study (Marquis & Tilcsik, 2013). I have acknowledged that an entrepreneur's past recollections and perceptions of events may be flawed. However, as long as the entrepreneur considered a given event to be significant, I have considered that experience to be pertinent.

Given that I have conducted interviews in a cross-cultural setting, it was important to create a welcoming environment and conduct research on Israel prior to collecting the data. Indeed, researching and in turn understanding the context is paramount, as it has enabled me as a researcher to ask relevant questions and make better observations (Fontes, 2008). It was important to pay attention to non-verbal cues and implicit messages especially considering the language barriers. Indeed, although fluent in English as their second language, probing the participants and asking for clarification was at times mandatory to ensure clarity and avoid vague and ambiguous answers. As aforementioned, I also allowed the informants to direct the pace of the interview in order to put them at ease. Data obtained from the interviews were triangulated with additional sources of information including written observations as well as third party data on entrepreneurship in Israel gathered from books and articles delving into the topic. This allowed for the validation of data through cross verification as well as the widening of one's understanding on entrepreneurship in Israel.

Table 2. Profile of Interviewees

Participant	Gender	Age	Israeli	University	Start-Up Industry	Start-Up
			Born	Major		Experience
Entrepreneur A	F	50-60	No	History	High-Tech/ Consulting in Tourism	Yes
Entrepreneur B	M	20-30	Yes	Communications	High-Tech in Entertainment	No
Entrepreneur C	F	40-50	Yes	Biology, Chemistry & Education	High-Tech in Healthcare	No
Entrepreneur D	M	20-30	Yes	Computer Science & Business	High-Tech in AI/Software	Yes
Entrepreneur E	F	30-40	No	Judaism & History	Tourism	No
Entrepreneur F	M	50-60	Yes	Biology & Genetics	High-Tech in Healthcare	No
Entrepreneur G	F	30-40	No	Marketing	Tourism	No
Entrepreneur H	M	20-30	Yes	Marketing	High-Tech in Entertainment	Yes

# 3.4 Data Analysis

I analyzed the qualitative interview data using an iterative approach (Strauss & Corbin, 1990). Given that previous research has largely overlooked the prior experiences of Israeli entrepreneurs (Marquis & Tilcisk, 2013), my study was conducted in a new context, thus requiring me to record new observations and formulate new concepts. Hence with regards to my data analysis, I employed Strauss and Corbin's (1990) guidelines for developing grounded theory.

### **Identifying Emerging Themes**

According to Strauss and Corbin (1990), researchers should start analyzing data as soon as it presents itself. As such, the analysis begins after the first interview is completed. Therefore, unlike

other qualitative methods that require researchers to collect a large part of their data prior to examining their material (Strauss & Corbin, 1990), I began analyzing and coding my data immediately. An initial round of analysis was conducted where emerging themes were recorded. My interview audio files were first transcribed into a word document and were then imported into MAXQDA<sup>11</sup>. The use of certain MAXQDA functions including auto-coding and tag clouds enabled me to start open coding and give names to data observations (Locke, 2001). I began examining the descriptive and personalized interview transcripts that displayed my informant's view of the world. I drew upon common phrases and key words that became provisional themes (Locke, 2001). For instance, my first interview conducted with Entrepreneur A yielded themes such as 'living as an expat developed new ideas' and 'education in history facilitated consulting' that were duly noted. When producing open codes, I focused primarily on the text at hand and thus the codes were quite personalized. However, this influenced the way I proceeded with my other interviews, where some questions were tailored to garner additional information on certain themes. For instance, when one foreign-born participant mentioned immigration in passing, I sought to extract more information with the next foreign-born entrepreneur. I thus went back and forth between the data and my proposed concepts in an iterative fashion. At this stage, I attempted to summarize via codes what I saw happening in the data (Locke, 2001). Each new interview either confirmed or denied the importance of previous codes. My initial analysis and codes thereof were not based on theory. That being said, I acknowledge having entered the data collection phase with a certain amount of knowledge on Israel and I hence wanted to address certain questions throughout the interviews.

### **Formulating Concepts & Categories**

When I managed to collect all of my interviews, I attempted to identify commonalities and differences across my data which is often referred to as axial coding in grounded theory (Strauss & Corbin, 1990). Indeed, upon investigating the different life experiences and personalities of all the entrepreneurs interviewed, I began to generalize and consolidate the codes thus focusing on concepts that emerged out of common codes rather than perusing the actual raw data (Locke, 2001). At this stage, the once more personalized and heavily descriptive codes were rendered more abstract in order to create categories and subcategories (Strauss & Corbin, 1990). For instance, an open code that stated 'Jewish youth programs taught me how to manage and lead groups' became

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<sup>&</sup>lt;sup>11</sup> MAXQDA is a qualitative data analysis software. See <a href="http://www.maxqda.com">http://www.maxqda.com</a> for additional information.

'Judaism' with 'Leardership' as a subcategory. I used a MAXQDA function labeled MAXmaps to better visualize my data and findings at this stage (Appendix D). The revision of concepts was at times necessary as the data I had revisited did not always fit into my categories. Given that I wanted to analyze the role of prior experiences in influencing behaviours, I took notice of interactions that occurred across my data. As such, I began to not only identify and code prior experiences but their influence on behaviours as well. Hence, my data was rendered clearer and easier to work with.

### **Aggregating Theoretical Dimensions**

The final step in my data analysis was to enrich and validate my codes by linking the themes I have observed with theoretical insights (Strauss & Corbin, 1990). Indeed, after general axial codes were created, it was important to look for theoretical dimensions that would demonstrate how my data fits together (Table 3). This is paramount as interviewers are in charge of finding a way to convey a story. I endeavored to unify my categories into core classifications that were supported by theory, which are known as theoretical codes in grounded theory (Locke, 2001). Some level 2 (axial) codes were not regrouped into larger categories as they did not serve to address my research question. Indeed, codes that were merely relevant for one entrepreneur or that did not interact with other codes were not included in my level 3 codes (Mathias et al, 2015; Chell, 2008). Furthermore, I went back and forth between my coded transcripts and my literature review in an iterative manner in order to ensure that my new theoretical codes would address my research question. It is important to note however that certain theoretical concepts like 'self-awareness' which is not as prominent in the literature review as other entrepreneurial traits were added into the discussion section. Moreover, I began adding different variables to generate new connections (Locke, 2001). For instance, I attempted to compare foreign-born Israelis with their native counterparts and also observed gender differences across the data. I identified the important concepts and attempted to structure them in order of importance. I have also generated new theory by aggregating the codes. Indeed, I identified military experiences and immigration as new sources of imprint. As such, I extended existing research on the topic of organizational imprinting by shedding light on relationships and observations that would have gone unnoticed by researchers. I also used a conceptual model to demonstrate how the themes are interconnected (Figure 1). Indeed, I selected Strauss and Corbin's (1990) conditional matrix as a framework in order to implement macro and micro contexts into my analysis. I provided an overview of this framework in the findings section.

Table 3. Example of Data Structure and Coding Process

Raw Data	Initial Code (Level 1)	_	ory Code vel 2)	Theoretical Code (Level 3)
I thought, what are things I'm strong at? Because if I consider what I don't have, I didn't have most of the knowledge [] but I thought about what I am strong at and I know what I can do because this is what I did before as a manager. From opportunity to opportunity I learned and got encouraged.	Prior job as manager helped identify strengths and weakness as a leader.	Main Code  Career Experiences	Sub Code  Self- Awareness	Career Imprinting
There is zero doubt in my mind that my experience [abroad] helps me think outside the box. I think we have a very unique perspective, those of us that were exposed to locals.	Family's expat lifestyle helped gather new perspectives and think in different contexts.	Main Code Childhood Experiences	Sub Code  Creative Thinking	Family Imprinting
In the army, you have no choice but to improvise and think by yourself, especially on the field.	Army was useful in helping him generate new ideas and doing things on his own.	Main Code  Military Experiences	Sub Code  Autonomy & Improvisation	Military Imprinting
I come from a wealthy family of entrepreneurs. Money was never an issue so I believe that the risk part was minor from my perspective. [] If it doesn't work out it is not life changing for me.	His experience growing up in a wealthy family has made him more tolerant towards failure and less concerned with taking risks.	Main Code Family Experiences	Sub Code Risk-Taking	Family Imprinting

Source: Adapted from Gioia et al, 2012.

# **Chapter 4 – Findings**

## 4.1 Conceptual Model

In order to investigate how imprinting operates at the level of individual entrepreneurs and their subsequent entrepreneurial-oriented behavior, it is necessary to account for macro and micro conditions in which the phenomenon is embedded. The conditional matrix proposed by Strauss and Corbin (1990) allows for a better understanding of the relationship between the imprinting phenomenon and the interactions, conditions and consequences of significant events at different levels of influence (Strauss & Corbin, 1990; Scott & Howell, 2008). The macro and micro factors that have emerged from the data have been integrated into the matrix as an analytical tool, where each element of the matrix is displayed in its abstract form (Strauss & Corbin, 1990; Scott & Howell, 2008). In an attempt to better address substantive entrepreneurial phenomena, the findings extracted from the data were coalesced into broad categories, where each level in the concentric circles represents a different source of imprint (Figure 1). The outer edge of the circle denotes the global and national contexts that are deemed relevant to the study. Moving progressively inward, the entrepreneur's regional, communal and individual circumstances were captured in the analysis. At the center of the matrix lies the entrepreneurial behavior under scrutiny. In accordance with my conceptual model, the analysis and presentation of my interview findings will be structure into four different categories with the end-goal of analyzing the role of past experiences in prompting entrepreneurial-oriented behavior. Each section will present the findings from a different source of influence with supporting quotes to illustrate the variety of responses. It is important to note that the matrix serves to conceptualize macro and micro sources of imprint but does not suggest one layer to be any more or less significant than other layers.

# 4.2 Source of Imprint: Global and National Contexts

## **International Experience**

Travelling & Living Abroad

My interview findings suggest that an individual's prior experiences abroad can be considered an important source of imprint for entrepreneurs. Indeed, half of the respondents have considered

Behaviour Motives Travelling Macro & Living Abroad National Military Service Immigration Meso Education Career Micro Family Community Peers **Individual** Hobbies Interaction

Figure 1. Contextual Imprinting Forces in Israel

Source: Adapted from Strauss & Corbin, 1990

their travelling experiences to have enhanced their business instincts and broaden their perspectives. For Entrepreneur A who lived an expatriated childhood in Taiwan, her experience living in a foreign country has specifically led her to think **creatively**.

There is zero doubt in my mind that my experience [abroad] helps me think outside the box. I think we have a very unique perspective, those of us that were exposed to locals [...] It changes the way you view individuals, the way you view institutions. It gives you a different perspective of your own country, that what we

[Entrepreneur A, edited<sup>12</sup>]

As such, one's experience abroad may stimulate an individual's ability to think unconventionally and produce original ideas through a shift in perspective. Entrepreneur A also credits her experience abroad as having helped her develop inner resilience, claiming that individuals either learn to adapt and swim in a new environment or sink.

Entrepreneur H also reveals that travelling can sharpen important business and social skills for entrepreneurs. For instance, his experience in South America has allowed him to improve his language skills, discover new societies and markets and acknowledge that different countries produce different needs. He further asserts that some of his best start-up ideas formed whilst travelling abroad thus demonstrating that travelling experiences may also increase opportunity-recognition.

I want freedom from time and place and so I travel a lot while working. I often get start-up ideas by observing how people live elsewhere. I sometimes see things I wish I had access to back home and I try to make it a reality. Sometimes I see a problem that has not yet been addressed.

[Entrepreneur H, edited]

In the case of Entrepreneur H, his experience discovering different continents has not only helped him generate new ideas for his start-up application but also allowed him to better communicate his vision across cultures and form relationships with a diverse customer base. He claims that travelling spurs his **creativity**. He exemplifies this by stating that one of his current social applications was an idea that emerged out of observing the lifestyles of backpackers who travel extensively. He also disclosed that it is typical for aspiring Israeli entrepreneurs to travel abroad for a few years after being discharged from the army prior to attending university. In his opinion, its appeal lies in allowing individuals to decompress from combat and military life and rediscover themselves all whilst experiencing a newly found sense of freedom.

Entrepreneur D also maintains that travelling abroad and speaking with locals can serve as an important learning experience. He argues that along with meditation and exercise, travelling for leisure allows entrepreneurs to dedicate time to themselves, which he believes is necessary for

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<sup>&</sup>lt;sup>12</sup> Certain responses have been slightly edited to ensure clarity and coherence.

individuals to improve their ideas. On the other hand, Entrepreneur F has mostly credited his work-related travelling experiences abroad as having increased his problem-solving skills. For instance, his experience conducting business in the United States has helped him obtain new information, generate new knowledge and make informed decisions. By gathering a better understanding of the USA's healthcare system, he has understood the nature of health-related problems in the USA and has thus sought to provide various solutions to the issue at hand through his start-up. As such, being exposed to different business environments and unfamiliar situations can help entrepreneurs make better decisions and become creative problem-solvers. It is important to note that although individuals who enjoy travelling abroad might be more endowed with creativity and have an open mind set to begin with, their exposure to diverse experiences can help guide their problem-solving and creative efforts.

# Proposition 1: Prior experiences abroad can elevate one's creative mindset and enhance one's ability to think outside the box.

Over half of the entrepreneurs in my sample claimed to have benefited from their experiences living or travelling abroad (Table 5). I deem these international experiences relevant to them as entrepreneurs as travelling has render them more open to new experiences and opportunities and has increased their creative efforts. These experiences have hence generated influential behaviours and attitudes that have persisted overtime.

#### *Immigrating to Israel*

The process of immigrating to a new country warranted its own separate code in the interview segments. Imprints that obtained a frequency of 2 or lower in my dataset have been regrouped into 'other' experiences. However, I recorded these findings as they may emerge as important sources of imprint. They also serve to exemplify some of the experiences of immigrant entrepreneurs in Israel. Hence, although only two of the three foreign-born Israeli entrepreneurs in my sample specifically discussed their experiences moving to Israel as an immigrant, these findings still remain noteworthy. Both Entrepreneur E and G have argued that being a foreigner has its own set of challenges. Not only must immigrants reinvent themselves in a new setting, but they must also learn to cope with the uncertainty of operating in an unfamiliar environment and transitioning to a new life. Entrepreneur E claims that moving to Israel has made her more comfortable with stepping outside her comfort zone and **taking risks** in order to succeed as an outsider. On the other hand,

Entrepreneur G claims that moving to Israel has helped her channel her **creativity**, especially in the idea-generation stage. She claims that surmounting specific challenges such as language barriers as a foreigner and thinking differently from her Israeli counterparts has given her the idea and drive to start her business in the tourism industry.

I came from the outside and there was a language issue, so that really helped me start [...] There would be events listed in the Hebrew newspaper for kids and they weren't listed in the English newspaper and I knew my kids could enjoy the event because they speak Hebrew fluently... but I wanted to search for the information in English for others. That really helped. It was really the drive for starting the business.

[Entrepreneur G, edited]

As such, although immigrants may develop entrepreneurial traits as a strategy to cope with displacement and adapt to a new host country, they may also as outsiders observe a need in the market that has yet been addressed by locals.

# Proposition 2: Immigrating abroad can increase an individual's risk-taking propensity and creative thinking.

I consider the immigrant experiences of Entrepreneur E and G to be relevant to them as entrepreneurs. Not only did their experiences entering a new country as a foreigner capture the reality of many Israeli entrepreneurs but it also propelled them to act entrepreneurially. Their tolerance for ambiguity and their ability to think creatively appeared to have in part manifested from their desire to succeed in a foreign environment.

### **National Military Service**

## Transferable High-Tech Skills

The findings indicate that Israel's mandatory military service maintains a significant influence on individuals engaging in entrepreneurship and thus serves as a notable source of imprint. Indeed, all Israeli-born entrepreneurs in my sample, regardless of gender, have acknowledged with varying degrees of importance, the role of the military in shaping their entrepreneurial profile. The impact of the military on Israeli society is further reinforced by the fact that the country's citizens enlist in the army at a young age, rendering them more susceptible to external sources of imprint.

I don't know if you've ever been to the military, it's all about breaking someone down to the point where they grow up in a military fashion [...] It's easier to do that to an 18-year-old who never left Mom's side, which is why they prepare you at that age.

[Entrepreneur A, edited]

The analysis of various interview segments has revealed that the army's greatest contribution to entrepreneurship lies in the abundance of transferable job skills. These high-tech skills can help entrepreneurs foster **innovative** behavior. The Israeli participants argued that the army serves as an effective boot camp for technology professionals and allows individuals to hone specific skills ranging from engineering to data analytics and and/or telecommunications (etc.). The injection of these skills into society has prompted the rise of high-tech start-ups thus affecting the entrepreneurial intention and aptitudes of many Israeli civilians (Senor & Singer, 2009). As such, most respondents recognized the recruitment of young Israelis into the army as integral to the country's entrepreneurial success.

Our army has to be top-of-the line, frontline, high-tech, so our best and brightest go into these units and develop this really cool hardware and software. They get out of the army and what are they going to do? [...] They will work for a start-up or establish their own.

[Entrepreneur A, edited]

In 1998, ICQ Mirabilis<sup>13</sup> [...] proposed that the computer could communicate with the network through a port [...]. They knew [the technology] probably from communication units in the army. Otherwise, why should they have this knowledge at twenty?

[Entrepreneur F, edited]

At the individual level of analysis, some respondents provided a more detailed account of the specific skills they had acquired whilst on active duty. Entrepreneur H for instance proclaims that his experience as a researcher in the army's intelligence unit enabled him to acquire specific

<sup>&</sup>lt;sup>13</sup> The interviewee explained that ICQ Mirabilis is an Israeli company that pioneered instant messaging and is a start-up success story that has inspired many Israeli entrepreneurs.

research and coding skills needed for his current AI start-up. When asked about the development of his social app, Entrepreneur H also credited his task in the army as having allowed him to become proficient in software engineering.

I remember I learned programming languages in the army [...] It is useful to me now as an entrepreneur developing apps.

[Entrepreneur H, edited]

Participant responses hence indicate that one's function in the army can greatly influence the degree to which a soldier can obtain transferable high-tech skills. In the case of Entrepreneur B, his experience as a frontline soldier did in no way assist him in cultivating high-tech expertise since he was not exposed to such training. Nevertheless, he did acknowledge the role of the army is fostering creativity. Furthermore, one foreign-born respondent in my sample argued that she would probably have benefited from mandatory military service after observing the impact it had on her own children. In her opinion, the women of today especially benefit from the army as it serves as a means of promoting gender equality as well as upward social mobility.

Today we do have girls in combat units, a few, not a lot, less than what we need, but we have some girls in these tech unit [...] We've got girls working on repairing engineering jets and stuff like that, which never would've happened back in my day. But do girls benefit today? Yes. A lot of those working in high-tech today have done so because they either came out of that unit or they have some sort of connection before entering the workforce.

[Entrepreneur A, edited]

Hence, the Israeli army serves as an incubator for R&D and technological leadership. Specifically, one's military experiences appears to impact an individual's ability to **innovate** and think **creativity**, which according to the literature review are two behaviors that are considered entrepreneurial in nature (Chell, 2008). Not only does the army create the environment needed for soldiers to become technologically savvy and master highly sought skills but it also forces men and women alike to push the boundaries of their respective comfort zones. For instance, Entrepreneur H specified that Israel's special forces operate outside the box and require soldiers to manage and carry out tasks on their own thus embodying *rosh gadol*<sup>14</sup> and promoting innate

<sup>&</sup>lt;sup>14</sup> Professor Dafna Kariv from COMAS University explained that Rosh Gadol means 'Big Head' in Hebrew and refers to human ingenuity and the importance of seeing the big picture (Leblanc, 2015).

decision-making skills amongst combat units. The military appears to favour organic learning over structured processes. He further maintains that the army teaches soldiers to act **autonomously**. Indeed, trainees are required to be resourceful and to proactively think for themselves. As such, soldiers are often left to their own devices in life or death situations. Entrepreneur C also supports this claim by stating that the army helps young people mature into responsible adults. Indeed, she states that soldiers are taught to exert immense self-discipline and autonomy whilst on duty.

You learn how to be independent...to take more responsibility, and to lead people. I think this is part of the soft skills and the belief in yourself that you learn because you know the angle.

[Entrepreneur C, edited]

Finally, Entrepreneur B, who did not benefit from the army's network and high-tech training, has nonetheless recognized the role of his military experience in developing his creativity and autonomy, which was born out of a need to change his existing circumstances.

I was in a ground bottom place [in the army] and my mind got very creative to try and find ways to get out of there and make my life better. I believe that the same train of thought is very similar to that of being an entrepreneur.

[Entrepreneur B, edited]

#### Network Creation

The findings also reveal that the IDF's brotherhood of soldiers at war traverses to the civil sphere, where the camaraderie amongst soldiers transcends the army and trickles into the community. This evidently influences Israeli life and may be especially true of the Israeli army due to the state's relatively small population and the Jewish emphasis on community building (CIA, 2017; Solomon, 1996). Indeed, the participants stated that is it not uncommon for individuals to interact and work with their peers from the army. These social ties formed during years of service can provide future opportunities and resources for entrepreneurs, including access to a diverse talent pool. For instance, Entrepreneur D and Entrepreneur H both leveraged their army network to gain access to certain skill sets. Entrepreneur D found mentors and consultants in his industry through his ties with other military veterans. He claims that there is a very high degree of transparency, trust and familiarity within the community and that these ties rarely develop into client-based relationships. According to Entrepreneur H, the relationships formed during the army are based on a bedrock of **trust**, cooperation and team-building since soldiers depend on one

another to survive. In his case, Entrepreneur D used his connections to find experts in his field in an attempt to build a founding team.

It's also the people you know, the people you work with in the army eventually become great people outside and they are the ones who lead the next businesses and it helps you to build a network of connections [...] you can consult with these people [...] but it's not people I would use as customers or stuff like that, very rarely.

[Entrepreneur D, edited]

The army provides individuals with a network of good and talented people, many of which can make good future business partners like people on my team.

[Entrepreneur H, edited]

Entrepreneur B's response, on the other hand, yet again demonstrates the importance of one's function in the army in leveraging not only high-tech skills but one's connections with their respective army units. He stated that the people he encountered in the army were in no way connected to his start-up, which can be in part explained by his non-high-tech role in the army.

The people that get out of there [in the army] are skilled as hell but that's not where I've been.

[Entrepreneur B, edited]

Proposition 3: Military imprinting can influence an individual's commitment to innovation as well as his/her ability to think creativity and act autonomously. It can also increase an individual's tendency to trust people.

All native-born entrepreneurs in my sample have recognized the importance of the army in influencing entrepreneurship in Israel (Table 5). Whilst some respondents such as Entrepreneur F adopted a more macro perspective and mostly discussed the benefits of military service in general, most entrepreneurs in my sample claimed to have personally benefited from the army. A significant number of participants in my sample have credited the army in fostering creativity and autonomy. Other responses reveal that the army teaches individuals to cooperate and rely on team members, thus cultivating a high level of trust. These military experiences have thus imprinted onto entrepreneurs over time.

### 4.3 Source of Imprint: Institutional and Organizational Contexts

### **Educational Experience**

#### Formal Education

The findings suggest one's educational trajectory to be the greatest source of imprint for entrepreneurs living in Israel. Indeed, 7 out of 8 respondents (87.5%) confirmed the role of their higher education in influencing both their personal and professional development (Table 4). All entrepreneurs in my sample have enrolled in university, with most seemingly considering it a default choice prior to establishing a start-up in Israel. This can be in part explained by the Jewish emphasis on scholarship (Solomon, 1996) where higher education appears be considered a rite of passage into adulthood (Senor & Singer, 2009). Indeed, Entrepreneur D upholds that learning has long been considered part of the Jewish heritage, where knowledge and communication is prized above all else. He also argues that Jews are historically inspired by smart leaders.

Jewish people are called the 'people of the book'. Regardless of if you believe in God or not, historically speaking for 3000 thousand years the gem of the Jewish people is knowledge [...] and learning. A lot of our creation is based on knowledgeable things, whether it's research [conducted] to improve water systems or working to obtain better cyber security [...] it's about knowledge and learning.

[Entrepreneur D, edited]

The interview transcripts suggest that securing a higher education may be a good investment for aspiring entrepreneurs. Entrepreneur A claims that one's prior university education can give individuals the tools needed to establish a successful start-up. She exemplifies this by stating that her degree in history has given her the tools needed to do excellent, reliable research that is useful to her everyday as a consultant. She also maintains that obtaining an education can help individuals discover their talent/passion and direct it towards entrepreneurship. This supports my findings that the majority of entrepreneurs interviewed have establish a new venture in a field where they could leverage their educational knowledge. For example, following his major in science and genetics, Entrepreneur F has established a start-up in the healthcare industry. Entrepreneur C has utilized her degree in biology to establish a start-up that aims to develop the technology needed for the early detection of cancer. Entrepreneur E has established a business in the tourism industry after

pursuing a degree in Jewish history. She states that her acquired knowledge of Israel's history has motivated her and given her the drive and passion needed to establish a start-up.

Learning about Israel and Judaism played a very big role in [...] nurturing me and molding the direction I took later as an entrepreneur. It served as an outlet for my passion.

[Entrepreneur E, edited]

Table 4. Frequency of Relevant Imprinting Codes (one hit per document)

Sources of Imprint	Frequency	Total Percentage	% of Israeli- Born	% of Foreign- Born
Educational Experiences	7	87.50	80.00	100.00
Career Experiences	6	75.00	80.00	66.67
International Experiences	5	62.50	60.00	66.67
Military Experiences	5	62.50	100.00	0.00
Upbringing	5	62.50	40.00	100.00
Hobbies	4	50.00	60.00	33.33
Mentoring/Networking	4	50.00	60.00	33.33
Others <sup>15</sup>	4	37.50	0.00	100.00 <sup>16</sup>
Total(Valid)	8	100.00	100.00	100.00
Missing	0	0.00	0.00	0.00

Attending university appears to increase the knowledge, competencies, confidence and resourcefulness of entrepreneurs. Entrepreneur C claims that having studied a variety of different subjects in school has helped her manage and lead her team as well as develop a specific way of thinking. According to her, the more knowledge an entrepreneur has, the more she/he asks the appropriate questions and knows how to properly interpret and analyze information. Her educational background has taught her how to be efficient and has given her **confidence** in her

<sup>&</sup>lt;sup>15</sup> Other imprinting sources include: Immigration, Kibbutzim and Judaism. However, only immigration was considered to be a source of imprint as 2 of the 3 foreign-born entrepreneurs mentioned immigration as an important experience. On the other hand, Judaism and Kibbutzim where experiences that can only be confirmed by one entrepreneur. They also did not appear to be as conducive to entrepreneurship.

<sup>&</sup>lt;sup>16</sup> All four 'other' imprints were mentioned by the three foreign-born entrepreneurs in the sample.

abilities thus reducing her stress. Indeed, her master's degree on learning processes in cognitive science was useful to her as an IT manager as she acquired the ability to understand her user and customer. She thus acknowledges that her various degrees in biology, chemistry, education and cognitive science gave her knowledge to fall back on and has encouraged her to pursue her endeavors in such scientific industries.

Furthermore, Entrepreneur D claims that obtaining a formal education can help individuals build an expertise, especially in a field that requires years of dedication such as software engineering and AI. Entrepreneur H has mainly associated his experience in school with enhanced human capital whereas Entrepreneur F recognized his educational background and general willingness to learn as having helped him cope with **uncertainty**. He claims that entrepreneurs are constantly exposed to unfamiliar situations and he believes the key to alleviating the stress associated with uncertainty is to leverage one's knowledge and engage in continuous improvement.

### Informal Education

Alongside formal education, certain interviewees emphasized the importance of informal self-directed learning. As the structural nature of schools can sometimes stifle individual expression, Entrepreneur A, C, D and F have acknowledged the importance of informal learning and conducting independent research. Entrepreneur F asserts that the rewards of reading every day and being an autodidact include obtaining new knowledge and/or making connections to skills that one already possesses. It also evidently fosters independent thinking and cultivates passion. All four entrepreneurs have combined informal learning with a formal education since a young age. For instance, Entrepreneur D, has been mastering various skills since high school.

I learned to code at 14 years old on my own [...]It did help me understand and orient me into technological start-ups because I could communicate better with people who were better than me and stronger than me in terms of development.

[Entrepreneur D, edited]

Although one can argue that passion-filled individuals who are driven with purpose may be more likely to surround themselves with their work, individuals who are self-taught since a young age appear to also have a high need for achievement and thus work harder to master important skills out of the desire to excel. An entrepreneur's need for achievement (N-Ach) has motivated these individuals to work towards their goals and improve their knowledge. Their past learning

experiences however have not influenced their N-Ach. Although arguably more of a lifestyle than a past experience, individuals who have recognized the importance of self-learning since a young age have developed a high **internal locus of control** over time, thus attributing their own entrepreneurial successes to their efforts rather than luck.

# Proposition 4: Educational imprinting can influence an individual's internal locus of control and ability to cope with uncertainty. It can also bestow self-confidence on entrepreneurs.

Prior educational experiences appear to have a profound impact on entrepreneurs living in Israel (Table 6). These individuals largely engage in activities in which they have an expertise. Their informal or formal educational background serve to increase an individual's confidence in his/her abilities and can cultivate a passion. Having knowledge to fall back on can alleviate stress and give individuals the confidence to engage in high risk activities. These educational experiences have thus imprinted onto entrepreneurs overtime.

### Career Experience

My findings indicate that prior career experiences are a significant source of imprint for entrepreneurs living in Israel. 6 out of 9 respondents (75%) in my sample have credited their early career experiences as having influenced them as entrepreneurs. Indeed, most interviewees have amassed years of work experience prior to establishing their new business ventures. Entrepreneur F who has spent more than 15 years working as an IT consultant for multinational companies claims that his current approach towards his start-up stems from his experience as a technological expert and innovator. Indeed, being a tech consultant often required him to think outside the box and operate in unconventional ways. He has thus cultivated an unorthodox way of thinking that he also applies to his new business venture. He claims that he does not always follow the rules and guidelines but rather does things his own creative way. For this reason, his current website aims amongst other things to expose the ineffectiveness of common health practices that are deemed the norm in society (e.g. flu shots for children). His prior career experience has equipped Entrepreneur F with the ability to think **creatively** and adopt an experimental attitude. As such, formative work experiences may influence an individual's cognition and way of thinking about the world.

Upon discussing her past experiences, Entrepreneur C has stressed above all else the role of her previous careers in shaping her as an entrepreneur. Her past experience in a commercial working environment has exposed her to years of business practices such as project-based management, which has given her the **confidence** and **self-awareness** needed to manage a founding team and make better leadership decisions. Thus, career experiences may help individuals develop new skills but it may also influence their ability to lead and run a business in the long term. She also argues that her time spent in a corporation has allowed her to identify her strengths and shortcomings as a manager and has helped her qualify for the position of CEO. Her career background was deemed a better fit for the company as it leveraged her strengths and past career experiences in operation management and IT.

My co-founder and I changed positions [...] We are good friends and I really appreciate it...but what happened in our case was that he came from sales and as a CEO with experience in sales, he doesn't know what it means to do delivery. He kept selling his dream when he was at the stage where you deliver it.

[Entrepreneur C, edited]

This quotation demonstrates that career imprints may be reflected in one's leadership and decision-making choices as a business founder, especially with regards to organizational strategy and structure. Furthermore, career experiences can also influence the organizational culture of a start-up. Indeed, entrepreneurs in my sample who appeared to have gone global or worked abroad in their past careers such as Entrepreneur A, F and G seem to stress the importance of a flexible and adaptable work environment. Although not explicitly mentioned in the interviews, all three entrepreneurs have repeatedly emphasized the importance of openness, adaptability and unconventional thinking as part of their core organizational values.

Moreover, career imprinting may also include entrepreneurs who have previously established a start-up. For Entrepreneur H, having former experience launching a business has taught him the importance of being passionate. He argues that if an individual is not passionate about his/her start-up, there is a high probability that it will fail. He also maintains that his previous experience as an entrepreneur has made him more **self-aware.** He became more attuned to his desires and motives after his first start-up failure. Entrepreneur D also claims that his past career experiences, especially those acquired at young age, has helped him obtain a better understanding of himself as an individual.

I was working since I was 14 years old [...] I had like 20 jobs [...] Every job I had was in order for me to get experience in these fields [...] I was doing everything, from being a guide to being a counselor, teaching kids to code and doing robotics [...]. I was chasing something...I wanted to know what I am good at. [...] Now I know what I want to do and how to get there.

[Entrepreneur D, edited]

# Proposition 5: Career imprinting can influence an individual's self-confidence, creativity and self-awareness.

Past career experiences appear to greatly influence the type of leader an entrepreneur shall become. Entrepreneurs in my sample recognized their previous career as having increased their self-awareness as an individual and as an entrepreneur. Some have also considered their past experiences to have affected their confidence and ability to lead a business especially for industry-specific work experience. Finally, others have also developed creative thinking skills over time. For instance, Entrepreneur F's past career experience as a consultant (providing creative solutions for clients) has helped him develop and implement original ideas in his new business venture. As such, career imprints serve as a notable source of imprint for entrepreneurs in my sample (Table 6).

# 4.4 Source of Imprint: Collective, Group and Family Contexts

### **Upbringing & Childhood Experiences**

My study has found that an entrepreneur's upbringing can serve as a notable source of imprint. Indeed, half of my respondents have considered their experiences as well as the treatment and instruction received throughout childhood as having shaped them as entrepreneurs. More than half of the participants had at least one entrepreneurial parent who established their own business. Although my sample is too small to draw definite conclusions, these findings suggest that children who were raised by entrepreneurial parents may be more likely to become entrepreneurs themselves. For example, Entrepreneur G stated that her fathers' successes launching businesses in various industries has given her the motive and **confidence** needed to engage in her own undertakings. She also added that her father taught her to focus on her strengths rather than her

weaknesses. Entrepreneur G also claims that her love of learning has been instilled upon her by her father. Entrepreneur E believes that her parents' support has rendered her more confident and determined to achieve her dreams.

First of all, I just think that my upbringing with my parents, that they always believed in me [...] is something that made me believe in myself.

[Entrepreneur E, edited]

On the other hand, Entrepreneur B asserts that his father's independent lifestyle influenced him to be **autonomous**.

I grew up in a family with money. My father and grandfather owned a business for a long time and when you are born to an independent father, you'll most likely be independent yourself.

[Entrepreneur B, edited]

He also claims that witnessing his family's entrepreneurial success was both helpful and inspiring to him as an entrepreneur. He states that much like his parents, he did not want his life to be dogmatic and he is not someone who is motivated to work towards achieving other people's dreams. He also asserts that his experience growing up in a wealthy family has made him more tolerant towards failure and less concerned with **taking risks** given that he has a support system to fall back on.

Furthermore, Entrepreneur A, who lived an expatriated lifestyle abroad, acknowledged her experiences growing up in a foreign country as having cultivated her creativity (see section on travelling). She argued that whilst many children of expats lived in their own enclaves and were not interesting in interacting with locals, her mother encouraged her to venture into the unknown and interact with new cultures. These experiences have allowed her to gather different perspectives and think outside the box. She also states that her mom has taught her to be **self-confident** and **autonomous.** 

There is zero doubt in my mind that the way she raised me to be confident, letting me fail and letting me make choices made a difference. She did not intervene and it's a hard thing to do as a mother not to interfere but she was always there to support me.

[Entrepreneur A, edited]

In some cases, the informants revealed to have exhibited an inclination towards entrepreneurship as children. For instance, Entrepreneur B and H have discussed their attempts to

run a business in primary school. Indeed, both entrepreneurs sold items (e.g. stickers and hamsters) at school for years. This evidently helped them understand the notion of business at a young age including how to sell and market a product. These childhood experiences seemed to have increased their passion for entrepreneurship. Hence, some of the findings raise the question of whether entrepreneurs are born or made (Eysenck, 1967). Although the entrepreneurs were evidently influenced by the lifestyle led by their parents, they may also have been genetically predisposed to act a given way.

# Proposition 6: Childhood imprinting can influence an individual's confidence, autonomy and risk-taking propensity later in life.

Inherited traits notwithstanding, the findings highlight the importance of childhood past experiences in nurturing entrepreneurial traits. Family appears to maintain a significant influence on some entrepreneurs and these experiences undeniably play a critical part in who they are today as individuals (Table 7). Most of the participants imprinted by family claimed that their parents promoted self-confidence and autonomy at a young age. In addition, one entrepreneur claimed that his family's wealthy background also increased his risk-taking propensity.

### **Networking and Mentoring Experiences**

My interview findings reveal that networking and mentoring can be considered important sources of imprint for entrepreneurs (Table 7). The respondents recognized the role of their networks in generating opportunities, building connections and raising one's profile in a given industry. In the case of Entrepreneur B, his PR and event-planning efforts has allowed him to meet a variety of different people at social gatherings. He claims that his networking efforts helped him conduct marketing research and build a customer base. He also added that interacting with high-ranking people made him realize that in the end every individual is a person no matter his power or background. This has thus fueled him with **confidence**, especially in handling networking events.

Different entrepreneurs, however, have different networking styles. For instance, Entrepreneur D argued that important social ties are not just about selling yourself and meeting potential clients, which was mostly the case for Entrepreneur B. In his opinion, the most fruitful relationships are built on information-sharing and advising. As such, his network mostly consists of specialists,

coworkers and high-tech army comrades. He also emphasized the importance of finding career mentors within one's network, as they can provide valuable lessons for nascent entrepreneurs.

You've got to have good mentors. I was surrounding myself with people that I can learn from. What got me to where I am is that I was wise to learn from their mistakes, and maybe create less of my own. In life, I think this is key. I read many books by people that inspire me and I also mostly associate with people I aspire to become.

[Entrepreneur D, edited]

Based on his tone of voice and posture that reflected a sense of assertiveness and passion whilst discussing his mentoring experiences, it appears that for Entrepreneur D, learning from individuals he admires has increased his drive and **self-confidence** as an entrepreneur.

Furthermore, Entrepreneur H also credits his past mentors as having helped him grow as an entrepreneur. For instance, his last mentor gave him advice on how to optimize his marketing efforts and how to recruit and retain talented employees, which in the long term allowed him to save time and money. In his opinion, constructive feedback and detailed guidance has increased his **self-awareness** and his ability to reflect on his own entrepreneurial style. Finally, Entrepreneur E considers her friendship ties to be useful to her as an entrepreneur. Indeed, she claims that whilst formal networks can be beneficial it nonetheless requires individuals to maintain a certain image.

Having a Facebook group with friends [...] is having a place to ask a question safely because I know that I have a certain image to maintain to world. When I'm not guiding tours and there are certain questions that I don't want to put out there, I ask my friends about something for instance about my branding.

[Entrepreneur E, edited]

Interestingly, the female respondent did not appear to leverage her social network in the same way that her male counterparts did. Her business network appeared to be more personal, informal and familiar. The men's network on the other hand seemed more professional and resourceful.

# Proposition 7: Mentoring and networking imprints can increase an individual's self-awareness and self-confidence.

Entrepreneurs imprinted by their networks and mentors have deemed their experiences to mainly increase their self-confidence. For one, entrepreneur B who continually leverages his social network argues that confidence is something that is acquired over time. In his case, years of

experience attending networking events and forming relationships with influential leaders appears to have increased his confidence. Both Entrepreneur B and D claim that the more you are exposed to uncertain environments and the more you learn about the industry you are operating in, the more confident you will become. Entrepreneur H, who has enlisted the help of a mentor claims that feedback and advice from a trusted source can facilitate self-reflection.

### 4.5 Source of Imprint: Individual Contexts

#### **Hobbies**

Although one's hobbies was found to be less relevant than other sources of imprint in my sample, the findings nonetheless acknowledge the influence it can exert on certain entrepreneurs. Pursuing a pastime of choice allows individuals to step away from work and reduce their stress levels, which according to Entrepreneur D can help founders foster **creativity**. Indeed, he argues that engaging in relaxing activities such as meditation and yoga as well as going offline can help entrepreneurs generate ideas. He also credits his daily exercise routine as being beneficial to him as an entrepreneur.

If I don't exercise I feel like I'm doing a sin to myself. It's so easy to sit in front of a chair, in front of a computer all day and say "Yeah, I am doing a start-up and things" but you need to put investment in yourself. If I am not going for a hike, if I'm not reading, if I'm not exercising ... I am not becoming a better person.

[Entrepreneur D, edited]

Moreover, Entrepreneur F has found his hobby for reading (which he developed as a child) as having helped him cultivate passion for his start-up. Indeed, reading multiple non-fiction books for pleasure on the topic of self-diagnosis and natural home remedies (etc.) has ignited his passion and interest in pursuing a start-up in the healthcare industry. Although one's passion serves more as an entrepreneurial motive in this case, being passionate and tenacious can stimulate one's **need for achievement**. Indeed, I have observed that entrepreneur F's dedication and passion for his start-up (that he has discovered through books) has strengthened his resolve and rendered him more goal-oriented.

Finally, Entrepreneur H also recognized his sport-related hobbies that he pursued as a teenager as having influenced him as an entrepreneur (Table 8). Indeed, having played professional handball for many years and eventually becoming team captain has improved his managerial skills. He claims that playing sports has taught him how to manage, connect and build a team as well as how to interact with his superiors.

# Proposition 9: Entrepreneurs imprinted by their hobbies can develop a higher need for achievement and experience increased creativity.

Hence, entrepreneurs influenced by their hobbies reported high levels of creativity and a higher need for achievement. Some passions such as Entrepreneur F's fascination with biology and healthcare can be transferred to a new business venture where the entrepreneur will evidently be highly vested in the firm's success and deeply involved in the decision-making process. This can in turn increase an individual's need for achievement.

Table 5. Data Table of Macro-Level Influences<sup>17</sup>

Coded Themes	Informant	Sample Quotes
International Experience	Entrepreneur A	"I grew up in a very unconventional way, I was raised in a military family and we moved around a lot. I think that this experiencewellyou either sink or swim. I think that most people that live that life develop some inner resilience, maybe I was born with it, but there is no doubt my upbringing played a roleit gave me self-confidence and self-faith. [] It is now second nature for me to pick up on social cues and to be able to blend and fit in with the native culture."
	Entrepreneur D	"I try to take my vacations. To be a better entrepreneurtravelling of course always helps and I try to always mix work with some travelling so when I go somewhere for work I will take some time out and just go to a restaurant and I will speak with people the local people and I see what they can teach me []."  "When your mind is resting and it's not working on something then you can start building up ideas. []. Don't be shy and do whatever it takes and talk to people and sign up, google things, find information."
	Entrepreneur E	"I immigrated to Israel and had to reinvent myself. It's the same personality trait that made me live with the risk of becoming an entrepreneur (in reference to starting over)."  "In Israel things aren't easy at all. On the one hand an immigrant is considered an outsider and in many ways, a woman is considered an outsider as well []. I was talented enough and creative enough to be able to establish myself in a nicheI didn't have to go with the system, I could create my own place and my own niche."
	Entrepreneur F	"I think if you are from a small country you always go out to other countries because you can't stay in your country so you have more an open mind and you understand more other people like what America is and how they are and their lifestyle."  "I lived in the US and opened a business there in the past, and visited there many times and it helps to be familiar with your target audience."
	Entrepreneur H	"After the army, I decided to travel to South America for some time off before university. When I was there I talked a lot with the local people, which helped me improve my English and my Spanish. I talked to people that are very different [] I learned how to greet these people and learned about their culture, it really helped me think differently and understand them."
Military Service	Entrepreneur B	"When you go to the army you start from nothing and you deserve nothing. You're practically an animal human being. You don't have the rights you are accustomed with and you are treated

<sup>17</sup> The quotes provided in the data table are from interviews or follow-up emails from research participants. Certain responses have been slightly edited to ensure clarity and coherence.

	I don't knownot like a human. In a way, I have never thought like that before. I was in a ground bottom place and my mind got very creative to try and find ways to get out of there and make my life better. I believe that the same train of thought is very similar to the train of thought of being an entrepreneur."
Entrepreneur C	"I think that in the army you learn how to be independent, to take more responsibility, and to lead people. I think this is part of the soft skills and the belief in yourself that you learn because you know the angle. You were in high school, finishing high school studies like everyone [] and now you are in charge of people with weapons and it looks very obvious that people are counting on you even though you met them last year in class. I think there is also the parameter of age and experience which is not only from the army or from workit's about maturing as a personso I think this part of itthis is what I feel. It was like when I become a mother [] you become committed."
Entrepreneur D	"In Israel, everybody does military service and military service provides you, it depends what you do, but sometimes with expertise and a connection base. It's a very small country and everyone knows each other so it benefits in terms of knowing who you need to talk to."  "I was in the intelligence unit and of course the military benefits you in several ways. The first thing is working under pressureknowing that everything is in your mind and you can always do more and you understand you can work for 72 hours without sleep, it works! You can do it. This is one part of it. The second part of it what you do professionally, it sometimes can be relevant to your domain. In my case, what I am doing right now specifically [] came from my experience as a soldier. The problems I had, the needs I had, and the researchbecause I was a researcher."
Entrepreneur F	"There are three major differences in Israel that make us the start-up nation. One is that young people at the age of eighteen go the army and develop high-tech skills. [] There are special technologies units in the army in very specific technological things, some in networks or communication, etc."
Entrepreneur H	"In the army, you have no choice to improvise and think by yourself especially on the field. If something fails, their attitude is 'let's see how we can make it better'. This is how I see it when working on my start-up."  "In the Air Force, after every training session everyone gets in a room and talks about the mistakes that were made and how to improve the situation. Everybody gives their opinion; it doesn't matter what rank you are. Everyone needs to manage themselves and when they are given a task, they must figure out what to do."

Table 6. Data Table of Meso-Level Influences

Coded Themes	Informant	Sample Quotes
Educational Experience	Entrepreneur A	"Although my degree in history and languages is not directly linked to me being an entrepreneur and my start-up, I think that the university experience in general creates well rounded peopleand I think that well-rounded people do better in life in general. University also can help create a network for later on. You get to know competent people and such."
	Entrepreneur C	"I did a bachelor's degree in biology, chemistry and education because I found biology the most interesting, I feel. I thought I would probably be a teacher so I have a certification for teaching and I finished my behaviours degree and I started to teach. I found that technology is very interesting and all I knew in that time was only Word. I didn't know anything about technology (in reference to her job in IT), I had no background in technology and I just started to learn my master's degree which is in cognition science at a Hebrew university and it was about the process of learningbut I took this in the IT worldhow people are learning technologies and it was very helpful because if you know and understand your user, your consumer, you know how to give them a better system."
	Entrepreneur D	"I studied computer science and I participated in entrepreneurship programs but I did not study it. I participated in entrepreneurship activities but never took a class."  "Studying Computer Science helped me understand and orient me into technological start-ups because I could communicate better with people who were better than me and stronger than me in terms of development. I could explain to them further what I wanted them to do and how we can achieve the solutionsbut my former education was more based on what I learned in college (rather than university)."
	Entrepreneur F	"I have a second degree in human genetics from the university so I have a very scientific background []. I worked with viruses. [] I found a systematic review that summarizes all the clinical trials and I realized that maybe I have an idea for a start-up. My start-up is perfect for me because it leans on science, on marketing, it's for consumers and it has to do with something good []."  "For my personal skills I have the background in science []. I read and read and read I decided what are the principles that guide my start-up such as science and all those regulations and treatments []. I investigate it and then I try to decide and the decision can be exactly what is common or the opposite and I don't really care, I care what's true. []. Basically being able to enjoy learning and being able to be in grounds that are uncertaineveryday there are so many uncertainties until you understand somethingand everything is newI love it but not everybody can deal with it."

T . TY	
Entrepreneur H	"I studied marketing []. My marketing classes in school were not that helpful for me, even though
	I have a start-up now that is in marketing consulting. I feel like my major in marketing helped me
	more with networking and meeting the right people and getting advice. There are many people I
	have contacted afterwards and some that I work with from university on projects and start-ups and
	stuff."
Entrepreneur A	"I was working at a non-profit as an executive direct and I had a horrible bosshe had founder
	syndrome and after that job I vowed to never work for someone again and I never did. My other
	boss was the best, I found myself many times trying to emulate the things he did on a subconscious
	level such as thanking employees every day and making a point of recognizing someone's
	contribution. That is something that I still make a point of doing, I learned from that experience."
	"My journalism degree helped me understand the importance of thoroughly doing my research
	before making a decision. It is definitely linked to what I'm doing now. [] Even though there is
	a lot of risk involved in a start-up, doing your research beforehand is keyI saw many start-ups
	fail because they did not do their homework."
Entrepreneur C	"I started to work in a small consulting company and then I worked in one of the leading IT
	companies in Israel, a novel company. I started as a training manager and I did like 11 years of my
	career there. [] I had to manage something that doesn't work, usually it was a profit and loss unit,
	a project or a business unit or whatever and it was like creating this from the beginning, or taking
	this idea [] and bringing it to another place. It's very similar to the things you do in a start-up
	because you have an idea, and thoughts and you have to take them to the place you want."
	"I think for myself creating the team, finding a waythere are a lot of question marks on the way
	because sometimes nobody did it before you. [] . I had that every time I had a customer that I
	would have to start from the beginning. I had a few projects like that (in reference to her career)."
Entrepreneur G	"I had worked for 3-4 other companies in America in marketing []. I think what got me going
Ziivi oproniour o	was marketing for families and kids. Every time I had to choose a project I would go for the
	catalogue with the kids toys and from there I went to Barnes and Nobles and I worked on their
	marketing and from there I went on to do consulting in marketing. After business school, I worked
	very hard to apply for a job at a toy company in Chicago. So, it focused me on the kids marketing.
	[] My internship put me in the mind of a parent like the marketing I do now to help parents."
Entrepreneur H	"I knew when I was 14 years old that I would become an entrepreneur. Back then I didn't know
Entrepreneur II	how it was called but I knew I wouldn't be happy working for other people. When I was 5 years old
	I had my first lemonade stand and when I was 8 when I worked as a freelance paper boy. When I
	was 10 I sold over 30 hamsters []. When I was 14 my dad gave me the book <i>Rich Dad Poor Dad</i> .
	That was the point that I've realized what my future was going to look like. Later my dad gave me
	\$3K to trade in the capital market and I managed to make some extra dollars and learned a lot"
	"I just kept creating small business here and there and doing things on my ownas I learned I
	became better and more confident and aggressive in what I was going to do next."
	occame oction and more confident and aggressive in what I was going to do noxt.

Career Experience

Table 7. Data Table of Micro-Level Influences

Coded Themes	Informant	Sample Quotes
Upbringing	Entrepreneur A	"Both of my parents were hard workers and valued education. They were trailblazers. My mother was truly artistic and had a unique world view for her time. The one thing I got from my mother is to question authority."
	Entrepreneur E	"I think my parent's belief in me inspired my belief in myself, and where other people may hesitate I jump in. I would say that is the most significant influence from my parents since they were not entrepreneurial in any way."
	Entrepreneur G	"My father is an entrepreneur and he started a businessactually he had a bunch of businesses but his most recent business, he bought a company. When he bought it, it was a book company that had pricing information for cars and he turned the business around into an internet business and he did it in his office and I kind of saw it all happening and now it's a huge company based in California with hundreds of workers, maybe thousands. I would say he was probably my biggest influence and he encouraged me to go to school."
	Entrepreneur H	"My father is now a university professor and an entrepreneur. He only became an entrepreneur when I had already established my first start-up so it did not really impact me. But, my father gave me important lessons and advice when I was young. He helped me understand the notion of business. For instance, my father bought us hamsters and when they had babies our father told us that we had to sell them and so we learned to how sell and market a product when we were very young."
Networking & Mentoring Experiences	Entrepreneur E	"Communal activities always play a role in networking and building my brand which is very community focused. I like to help the community (synagogue, school) by providing them with ideas or contacts and they do the same for me."
	Entrepreneur H	"I had specific positive experience was when one of my mentors guided me on how to do things in the business in a more efficient way and with minimum risk. It really helped at first when I was growing my business. He taught me how to budget my income and plan for the future."

Table 8. Data Table of Individual Influences

Coded Themes	Informant	Sample Quotes
Hobbies	Entrepreneur F	"I read a lot, when I am interested in a subject I'm reading it. So, I think I read about over 50 books so far in the last year. [] I had a column in one of Israel's economic magazines about a being a bookworma business bookwormso every month I commented on a book, a business book. []. I was raised in a house with thousands of books so probably it makes you read books and it makes you not be afraid of science and be clever or whatever. []. I read a lot of fiction but for me you have to understand that I really take pleasure in reading professional literature to understand marketing for example I read books since I was really young."  "I love to read and learn by reading []. I am not good at taking things for granted, I investigate it. I read about science and all those regulations and treatments and it makes me feel like I am doing something good and that I like what I'm doing, it's perfect for me."
	Entrepreneur H	"One of things I can think of is playing handball. I played in high school and many years professionally. I even became a team captain. Being a captain gave me a lot of skills. I learned how to manage people and build a team and it wasn't always easy. As captain, I had to connect and listen to everyone on the team. I was reporting to my coachit's kind of like an employee and his boss."

## Chapter 5 – Discussion

## **5.1 Sources of Imprint**

## **Educational & Career Imprints**

The qualitative interview findings provide preliminary evidence highlighting the importance of certain sources of imprint in directly or indirectly influencing an individual's propensity to entrepreneurship and entrepreneurial-oriented behavior. Contextual factors are important to consider as leaders do not operate in a vacuum and prior experiences can help researchers understand how entrepreneurs are nurtured into being (Chell, 2008; Welter, 2011; Zahra et al, 2014). The interviewed respondents shared the different life experiences that have influenced them as entrepreneurs in Israel. While certain prior experiences waned in importance and provided little impact on entrepreneurs over time, others have shown to exert enduring influence on one's behavior and were hence considered notable sources of imprint (Marquis & Tilcsik, 2013; Mathias et al, 2015). Some entrepreneurs stressed above all else the role of their military experiences in shaping their behaviour and attitude towards entrepreneurship, whilst others maintained the importance of family members and mentors as exerting the most influence. An analysis of my findings however, which were based on relevant codes and frequency of mentions in the interview data, reveal that one's educational trajectory and career experiences were clearly the most salient sources of imprint in the sample. This is perhaps due to the fact that one's university or career histories may be more easily selected, incorporate and extrapolated into new entrepreneurial settings (Marquis & Tilcsik, 2013). Educational and career imprints are not only transformative experiences that are considered rites of passage into society but they are also appear to be particularly resource-intensive (Davidsson & Honiq, 2003; Higgins, 2005). Indeed, they comprise not only of the skills or competencies acquired but also attitudes, basic assumptions and behaviors that are unique to having attended school or having worked in an organization. It thus equips individuals with a toolkit that entrepreneurial actors can call forth to direct their business endeavors (Johnson, 2007).

Leaders import educational and career imprints that can impact an individual's confidence, risk-taking propensity, creativity, self-awareness and locus of control, which are all traits that are deemed entrepreneurial by the literature (Begley & Boyd; 1987; Koh, 1996; Chell, 2008). Hence,

although firms create careers and foster knowledge in and of themselves, they are also embedded in their environment, where individuals stamp their own previous career and educational experiences into the organization (Davidsson & Honiq, 2003; Higgins, 2005). It is important to note, however, the importance of imprint-environment fit (Tilcsik, 2014). Indeed, various scholars have argued that a higher degree of fit between formative contexts and present conditions results in better imprint compatibility (Higgins, 2005; Marquis & Tilcsik, 2013; Tilcsik, 2014). In line with this, I have found that certain respondents acknowledged some of their prior experiences to be particularly well suited for their new business environment thus enhancing work performance. Furthermore, I have noted that a higher need for achievement (McClelland; 1961) can strengthen the career and educational imprinting process of individuals. Indeed, respondents who had a strong desire to succeed appeared to more readily acknowledge their educational and career backgrounds as having influenced them as entrepreneurs. This is perhaps due to the fact that entrepreneurs with a high need for achievement set high standards in order to attain specific goals and thus view formative university and career experiences as equipping them with the tools and knowledge needed to achieve these goals (McClelland; 1961; Chell, 2008).

#### **Military Imprints**

This thesis also argues for a new source of imprint and delves into its lasting effect on Israeli entrepreneurs. Indeed, scholarly notions of imprinting have been extended to include military experiences as an influential force. The findings reveal that one's prior military experience was considered an important source of imprint amongst all Israeli-born entrepreneurs in the sample (Table 4). I observed that the army serves as a socialization process whereby individuals become institutionalized into the larger societal and cultural narrative over time, thereby affecting the mindsets, behaviors and attitudes of young Israelis entering the workforce (Senor & Singer, 2009; Adamsky, 2010). The interviewed participants, especially those in high-tech army units, claimed that the Israeli army nurtures a culture of entrepreneurship by educating its soldiers to develop paramount business skills throughout their rigorous military training. The country's militaristic culture that emphasizes technological advancements and high performance transcends the army and is carried over into everyday life (Senor & Singer, 2009; Almar, 2015; Swed, & Butler, 2015.). The findings suggest that the selective retrieval of military capabilities in one's repertoire of life experiences is common and sometimes intuitive thereby structuring an individual's actions and behaviour.

The fostering of an innovative and creative mindset was revealed to be the most important entrepreneurial component nurtured in the army. One's high-tech military training requires individuals to generate new ideas, engage in novelty experimentation and create new technological processes (Senor & Singer, 2009; Adamsky, 2010). Furthermore, these battlefield savvy entrepreneurs are also comfortable with risk. This is due to the fact that army experiences have taught soldiers on the field to process ambiguity and assume responsibility when the lives of their fellow comrades are on the line (Senor & Singer, 2009; Adamsky, 2010). Unlike previous studies that have speculated that army veterans adhere to the status quo and follow rigid guidelines and rules (Higgins, 2005), Israeli soldiers are often left to their own devices and are encouraged to pose unconventional question, think outside the box and follow their own directives (Adamsky, 2010). For instance, one participant revealed that the IDF's air force division requires soldiers to contribute their ideas to the unit and even question their superiors irrespective of rank. They are also required to rapidly improvise new tactics whilst on the field and are thus forced to use ingenuity in various situations (Adamsky, 2010). Hence, the findings reveal that one's prior experience in the Israeli military effects the likelihood individuals will behave entrepreneurially.

Whilst the majority of the entrepreneurs interviewed appeared to have viewed their experiences in the army as positive, both Entrepreneur B and F considered their experiences as soldiers to be rather negative. For instance, Entrepreneur F recalled refusing to help the IDF create and manufacture military equipment as it went against his values. He wanted to work towards curing diseases and extending human life rather than destroying it. As such, this experience has strengthened his resolve to establish a start-up in the healthcare industry. Hence, the findings demonstrate that imprinted experiences can be positive or negative, and can both benefit the entrepreneur.

#### **Travelling & Immigrant Experiences**

The findings indicate that travelling and living abroad were notable prior experiences that influenced Israeli and foreign-born entrepreneurs in the sample. Over half of the interviewed participants recognized their international experiences as having increased their creative mindset. Indeed, whether its travelling for leisure or working abroad, entrepreneurs who are exposed to multicultural experiences argue that immersion in foreign environments cultivates inspiration and challenges individuals to think differently (Leung et al., 2008). A study conducted by Leung (et al.,

2008) argued that once an individual has recovered from culture shock and has started to adapt to a new environment, he/she can acquire new perspectives, learn new ways of thinking, and challenge learned behaviour. For Entrepreneur F who has lived in the US and has developed an interest for the American healthcare industry, living abroad has helped him think outside the box. By collecting and synthesizing information from various sources including those obtained whilst living abroad, he has developed the ability to question conventional wisdom on the healthcare industry such as the effectiveness of flu vaccines. Furthermore, immersing oneself in an unfamiliar environment can help people engage in creative thinking, including "the ability to recognize, generate, and synthesize seemingly unrelated cultural information in novel ways" (Lee et al, 2012: 2). Furthermore, entrepreneurs who spent a considerable amount of time living in a foreign country and interacting with foreign cultures such as Entrepreneur A, E, G and F either (a) directed most of their business efforts towards going global or (B) launched a product for foreigners and/or tourists living in Israel. Entrepreneurs who have merely travelled abroad such as Entrepreneur D and H, on the other hand, did not appear to prioritize international expansion (at least not in the short to medium term). This may be due to the fact that travelling for short periods of time only provides superficial exposure to new cultures (Lee et al, 2012).

Two of the three foreign-born entrepreneurs in my sample briefly discussed their immigrant experiences in Israel and deemed them influential. Entering a new country with little to lose, immigrants are more likely to take risks and try their luck at establishing a business, thus differentiating themselves from their host-country compatriots (Rajeswararao et al, 2008; Senor & Singer, 2009). They are also evidently more intrinsically motivated to succeed in order to be accepted into society and to reduce their liability of foreignness (Chrysostome & Xiaohua, 2010). Our findings reveal that outside perspectives can stimulate new ideas by thinking differently and challenging the status quo. Entrepreneur E and G have both brought a 'brain gain' of creativity to the Israel start-up scene (West, 2011). With the new immigrants of today being highly educated (Cheyette & Marcus, 1998), foreign-born entrepreneurs can become the influential high-tech leaders of tomorrow. Although some researchers have investigated immigrant entrepreneurship, (Senor & Singer, 2009; Chrysostome & Xiaohua, 2010) immigration as a source of imprint appears to have been largely ignored. This thesis hence calls attention to immigration as a notable source of imprint for founders living in Israel.

#### **Networking Imprints**

The findings also found one's mentors and networking experiences to have emerged as sources of imprints for both Israeli and foreign-born entrepreneurs. However, this imprint appears to be less significant than other aforementioned experiences. For foreign-born entrepreneurs, this can be in part explained by the challenges individuals can face when immigrating to a new country (Senor & Singer, 2009). It may be difficult for immigrant entrepreneurs to building a new social network as a newcomer and an outsider in society. The findings nonetheless acknowledge the importance of one's network (e.g. professional acquaintances, family members, advisors, etc.) in motivating and influencing entrepreneurs. It serves to demonstrate that individuals can imprint on other individuals thus acknowledging the importance of social influences (McEvily et al, 2012; Marquis & Tilcsik, 2013; Azoulay et al., 2017). Indeed, the interviews show that role models, peers and parental figures can greatly influence an individual's entrepreneurial behaviour as well as his/her work-related choices in the long term (Mathias et al, 2015). Moreover, the results support prior research on interpersonal influences that consider incidental attributes to become consequential once a relationship is formed (Marquis & Tilcsik, 2013). Indeed, one of my participants who initially selected his mentor for his high-tech and marketing expertise seemed to have indirectly adopted his mentor's preference for lean management after obtaining his advice and guidance.

Despite the small sample size, my findings suggest that men and women have different networking styles. This supports previous studies that argue for gender differences in network activities (Kim & Sherraden, 2014). Indeed, the male respondents mostly engaged in professional and formal relationships with customers, associates, mentors (etc.), whereas the female respondent maintained informal ties with friends. The literature argues that this may be due to gender-based structural inequality where, "in particular, women's child care and housekeeping responsibilities imposed by gender segregated roles tend to focus women's social network around family and kin" as well as neighbors and friends (Kim & Sherraden, 2014: 53). This also ties into motherhood as an entrepreneurial motive. Indeed, whilst every female respondent in the sample acknowledged their roles as mothers as having motivated and influenced them, this did not appear to be the case for male respondents. As such, women are perhaps more likely to let their family influence their entrepreneurial endeavors (Kim & Sherraden, 2014).

## **Hobbies & Upbringing**

The findings found childhood experiences and hobbies as sources of imprint that are closely linked. Indeed, upon examining the interview segments, I noted that most of the hobbies that exerted influence on entrepreneurs where pastimes that individuals cultivated at a young age. This can be due to the fact that younger children are more likely to take on elements of their environment and develop interests that persist into adulthood (Lee & Battilana, 2013). Entrepreneurs imprinted by their hobbies seemed to become more self-aware and creative, which are traits strongly linked with increased entrepreneurial performance (Chell, 2008). Individuals whose hobbies were transferred into their business ventures experienced increased need for achievement and were more intrinsically motivated to succeed as they were passionate in their work (Mathias et al, 2015). Furthermore, the findings also reveal the role of family members and one's upbringing in motivating and influencing entrepreneurs. As argued by certain scholars, family is a child's first reference group and thus the norms, practices and values of parents are deeply influential. Indeed, "social roles and interactions observed in early childhood come to be seen as "normal" practices by which the child evaluates his or her own behaviors" (Lee & Battilana, 2013: 11).

Initially, I considered motherhood to be an important source of influence under the umbrella of family imprinting. Upon further inspection, however, I discovered that motherhood served as the biggest motivator for all female entrepreneurs in the sample but did not foster any entrepreneurial behaviours. The interviewed participants revealed that they engaged in entrepreneurial activities in order to remain independent and have more flexibility in juggling their family and work life. However, their role as mothers did not foster autonomous behaviour but rather drove them to seek autonomy. Although I suspect that motherhood can influence entrepreneurial behaviours, due to data limitations, no conclusions could be drawn. Furthermore, more than half of the respondents had at least one entrepreneurial parent. Although the study aims to acknowledge past life experiences as influential forces thus arguing for nurture over nature, a question still remains: Can there be a genetic component that predisposes individuals to choose entrepreneurship (Eysenck, 1967)?

#### **Judaism**

As aforementioned, mandatory military service that is obligatory for both men and women is unique to Israel and serves as a technological incubator for entrepreneurship (Senor & Singer, 2009; Adamsky, 2010). However, other important experiences of Israeli citizens should also be

considered. Given that many foreign Jewish citizens immigrate to Israel or maintain a strong connection with the Jewish homeland (Senor & Singer, 2009), analyzing the experiences of Jewish individuals abroad and in Israel is relevant. With only one respondent in the sample having credited Judaism as having impacted her as a business founder, however, the findings suggest that Judaism may not cultivate entrepreneurship. That being said, past experiences may impact entrepreneurs in a variety of different ways.

Entrepreneur E argues that attending Jewish youth programs has helped her cultivate leadership skills. Jewish Camps allow individuals to strength their identity and connection with Israel. In recent years, certain overnight Jewish camps have directed their efforts towards teaching kids about business, entrepreneurship and technology (Lieber, 2013). The respondent demonstrated that attending such programs can help an individual discover his/her passion for education and entrepreneurship. She claims that individuals can also take on leadership roles such as camp monitor thus fostering responsibility, confidence and independence, which are traits that are proven to be beneficial to entrepreneurs (Chell, 2008). Furthermore, Judaism as a religion emphasizes the importance of community-building and education (Kellerman, 2002; Cheyette & Marcus, 1998). Indeed, the findings reveal that Jewish citizens value higher education. As such, many of the interviewees have obtained more than one university degree and have leveraged the skills and educational knowledge acquired at school in their business setting.

Despite such positive influences, another respondent revealed that Judaism can actually impede entrepreneurship and business in general. Indeed, Entrepreneur A argues that the more devote a Jewish person is, the more it negatively impacts their entrepreneurial endeavors. Jews who observe the Sabbath must close their business from Friday afternoon to Sunday morning (Almar, 2015). This also impacts non-religious individuals as almost all businesses and services in Israel are closed during that time, including the national airline (Orme, 1999). She also adds that orthodox Jews are very unlikely to pursue entrepreneurship. Not only do they live in self-imposed ghettos but Hasidic women are discouraged to finish high school and must prioritize their family and religious life (Almar, 2015). Furthermore, many orthodox men marry at a young age and are thus not required to work. As such, their lifestyle is not conducive to entrepreneurship. Despite these aforementioned positive and negative influences, I have not been successful in linking Judaism with specific entrepreneurial traits due to data limitations.

#### **Diaspora**

It is important to note that many Israeli entrepreneurs owe their success to the far-reaching Jewish diaspora that emphasizes and promotes community engagement and ties to the Jewish homeland (Kellerman, 2002; Cheyette & Marcus, 1998; Senor & Singer, 2009). The foreign-born participants in the sample are part of this transnational community of Jews that relocated to Israel in order to feel connected to the Jewish people. This process is evidently facilitated by the country's Law of Return (Ernst, 2009, See p.29). Entrepreneur E who studied Judaism and History and Entrepreneur G who works in the tourism sector both moved to Israel to reconnect with their heritage. By setting up businesses in their homeland, these individuals contribute to economic growth and job creation in Israel (Senor & Singer, 2009). Such skilled diasporic entrepreneurs stimulate innovation, exploit opportunities and create cross-border social capital (UNDP, 2009; Ojo, 2016). Entrepreneur A, for instance, revealed that her social network encompasses both home and host country citizens that are key players in her consulting business. Entrepreneur G decided to move to Israel to fulfill a need that has yet been met by the Israeli tourism industry. She thus used her different perspective as a competitive advantage. Diaspora networks are embedded with resources that entrepreneurs can leverage. Indeed, it can help migrant entrepreneurs recruit clients from the diaspora, create a support system and feedback channel within that diaspora and even consult with other migrants on institutional and legal barriers in the host country (Ojo, 2016). Hence, these findings reveal that the Jewish diaspora goes beyond remittances as many of its citizens contribute to the social, political and economic development of Israel. As such, the Jewish diaspora that unites individuals under a common religion can stimulate entrepreneurship in the homeland (UNDP, 2009).

#### **Kibbutz**

Merely one entrepreneur in my sample mentioned living in a Kibbutz as a notable past experience. Entrepreneur A revealed to have immigrated to Israel when the Kibbutz movement was still in its prime (Russell et al, 2013). Not only did she view her experience as memorable, she also illustrated that living in a Kibbutz can drive individuals to pursue entrepreneurship in an attempt to leave the commune and seek autonomy, as was the case for her husband. Having lived in a Kibbutz for a few years, she came to the conclusion that no good decisions are made by committees: "I think, getting the best advice is worth every cent and every moment but eventually someone has to make the decision. Committees don't take responsibilities for decisions,

individuals do" [Entrepreneur A, edited]. Hence, although she describes the Kibbutz as a unique social experiment, she ultimately asserts that living in a Kibbutz can drive individuals to seek independence but the communal agricultural life (in her day in the 70s-80s) was not conducive to entrepreneurial-oriented behaviours. However, the modern kibbutz has undergone a capitalist revolution and many Israeli communal settlements now encourage entrepreneurship (Shamah, 2015; Schuster, 2016).

#### **Importance of Agency**

The interviewed respondents attributed varying degrees of importance to their various life experiences. As such, each source of imprint affected entrepreneurs differently. It is important to note that whilst entrepreneurs have been subjected to various life experiences, they do not automatically absorb all elements of their environment without agency (Marquis & Tilcsik, 2013; Mathias et al, 2015). By analyzing both the verbal and non-verbal cues of the respondents, I found that one's general attitude towards a given experience and one's enthusiasm, or lack thereof, affects the level of influence the imprint exerts on the individual. In the case of Entrepreneur B, the language used during his interview segment and his reference to his university communications major as quote 'useless' reveals that this experience did not seem to bear a stamp. On the other hand, entrepreneurs who discussed their academic trajectory in depth and appeared to be passionate about their studies were definitely more susceptible to educational imprinting This signifies that entrepreneurs have discretion over what experiences can positively or negatively impact them (Mathias et al, 2015). Hence, the question does not center on whether experiences are positive or negative for the entrepreneur, but rather if these said experiences have been absorbed by the individual. For instance, the findings reveal that regardless of their perceived valence, individuals imprinted by the army appeared to exhibit entrepreneurial behaviours. While I acknowledge that the list of imprints is not exhaustive and that not all experiences influence the entrepreneurs in the same way, the findings nonetheless offer insight on how different macro and micro sources of imprint can shape current entrepreneurial behavior.

## **5.2 Entrepreneurial Traits**

Previous literature has acknowledged the study of entrepreneurship as a multidimensional phenomenon (Low & MacMillan, 1988). Indeed, scholars from various disciplines regard the

process as dynamic, complex and multidisciplinary (Filion, 1998). The purpose of this thesis was to approach entrepreneurship from a behavioural perspective. As such, I analyzed the life experiences that may be involved in shaping entrepreneurial traits. As the literature review suggests, entrepreneurial behaviours can serve to predict the likelihood that individuals will become successful entrepreneurs (Mathias et al, 2015; Chell, 2008). One's ability to take risks, innovate, build confidence and act autonomously has long been associated with entrepreneurship (Cromie et al; Utsch et al, 1999; Lumpkin & Dess, 1996; Koh, 1996). Along with a high need for achievement (McClelland, 1961) and an internal locus of control (Chell, 2008), these aforementioned attributes are the most well established traits in entrepreneurial studies where rigorous evidence can be found. My findings have revealed that the most common trait stemming from past experiences in Israel was innovativeness/creativity. This supports prior research that has considered creativity to one of the most if not the most important trait for entrepreneurs (Chell, 2008; Lumpkin & Dess, 1996). Although my findings include the emergence of these traits, I also drawn attention to lesser known attributes that have emerged in the data.

#### **Self-Awareness**

One behaviourial trait that emerged in my findings was self-awareness. Certain prior experiences appeared to allow individuals to garner a deeper understanding of one's character. Specifically, I found career imprints and mentorship to promote self-awareness. As suggested in my findings, this can be due to the fact that one's prior career and mentoring experiences may highlight one's knowledge, or lack thereof, and one's strengths and weaknesses in a business environment, especially when obtaining structural feedback from superiors and mentors. Interestingly, one's prior upbringing increased one's confidence to establish a new business venture but did not promote self-awareness as an entrepreneurial trait. Thinking introspectively and being consciously aware of one's character in a business setting appeared to help individuals build core competencies. It also allowed entrepreneurs to direct themselves towards specific goals and engage in personal development (Boyd & Vozikis, 1994). This can hence increase an entrepreneur's self-efficacy (Boyd & Vozikis, 1994). For one entrepreneur in particular, I found her improved self-awareness in her management role as having increased her ability to make better decisions and delegate tasks. Although this trait is not considered part of the big personality dimensions, it nonetheless serves to build leadership acumen.

#### Willingness to Trust

An entrepreneur's ability to trust also emerged as a trait in my interview segments. As a result of forging a brotherhood of soldiers in the army, Israeli-born entrepreneurs appear to have a greater tendency to engage in interpersonal trust than their foreign counterparts. Relying on other individuals and creating relationships built on reciprocity appeared to foster communication, collaboration and information/resource sharing. Trustful individuals in my sample seemed to better leverage their social network, which is especially important for nascent entrepreneurs as it can increase one's opportunities. It is important to note that trusting does not necessarily result in *naïveté*. Indeed, successful entrepreneurs do not blindly develop significant relationships but rather develop learnt or situational trust (Dibben, 2000). As argued by Dibben (2000) "trust is both the cause and the consequence of individual plans and purposes" (p. xiv).

## **5.3 Theoretical & Practical Implications**

This thesis argues for the importance of macro and micro sources of imprint and delves into its lasting effect on Israeli entrepreneurs. My findings have extended scholarly notions of imprinting to include military experiences as an influential force. Furthermore, immigration also emerged as a new source of imprint, as foreign-born entrepreneurs who lived in Israel viewed their experiences as outsiders to be influential. By properly identifying sources of imprint, the past, present and future actions of individuals may be better understood and predicted patterns of behaviour may ensue (Marquis & Tilcsik, 2013). Analyzing different strata through which influence occurs (e.g. national, institutional, familial, etc.) can demonstrate how and why individuals selectively incorporate certain elements of their environment. (Strauss & Corbin, 1990). Contextual factors can be considered antecedents to entrepreneurial behaviour and can allow researchers to consider the importance of tacit knowledge which refers to "the taken for granted, unarticulated, contextual understandings that help guide individuals and is crucial in theoretical development" (Slater et al, 2012: 282). As such, more scholars should analyze in depth the imprinting forces specific to certain cultures and observe its effect over time on the overarching society (Welter, 2011). My study hence aims to highlight the importance of understanding why and how history matters. In the case of Israel, observing country-specific life experiences can shed light on when, how, why entrepreneurship happens and the actors involved.

As revealed in the literature review, environmental conditions and founders' early decisions have been widely recognized to affect the growth and survival of a new business ventures (Zehir et al, 2015; Lechner & Gudmunddson, 2014). Understanding the forces that shape one's early decisions can provide clarity on the origins of a firm and its future predicted success. Moreover, focusing on how prior experiences bestow positive influences on entrepreneurs can further the current academic understanding of entrepreneurial typologies. It can also increase scholarly understanding of the different 'types' of entrepreneurs and how they are nurtured into being (Chell, 2008). It can teach practitioners the importance of establishing a work environment conducive to entrepreneurship. After all, my findings have revealed the importance of environmental conditions in influencing behaviours. It can further encourage entrepreneurial practitioners to hire individuals who exhibit these entrepreneurial behaviours, as they reflect characteristics of high performing individuals (Chell, 2008). Moreover, this study has attempted to challenge preconceived stereotypes that suggest military veterans as not suitable for entrepreneurship. Veterans are often labeled by managers as being driven by the status quo and are often described rigid and carefully controlled in their approach, which goes against entrepreneurial conduct (Higgins, 2005). However, in this thesis, military trainees have demonstrated an impressive amount of creativity, ingenuity, flexibility and autonomy thus imploring start-up managers to question certain preconceived notions of what constitutes favoured and ill-favored life experiences.

Selecting Israel as a case study sheds light on the country's success as a start-up nation. Indeed, Israel has proudly forged a successful entrepreneurial ecosystem in the face of adversity, and countless countries can benefit from cross-cultural comparisons (Senor & Singer, 2009). Despite contextual differences, Canada can learn from the Israeli business culture. First, the way Israelis interpret failure matters. My observations conducted in Israel and my interviews with Israeli entrepreneur reveal that Israelis are highly accepting of failure. As entrepreneur H voiced, failure is just part of the journey, another side of the coin. Entrepreneur C also claimed that learning from one's mistakes and celebrating failure is important, as everybody fails. Whilst recording my observations in Israel, a company called Tracx also discussed their view on failure, claiming that it was only through failure that they learned to improved their product (Leblanc, 2015). In this specific case, negative feedback from customers has forced the start-up to develop a new logo that is now well received. In Canada, on the other hand, entrepreneurs face more pressure to succeed as institutional norms dictate legitimacy and there is thus social stigma associated with failure that

may discourage entrepreneurship (De Clercq & Voronov, 2009; Simmons & Wiklund, 2014). Canada can endeavor to reduce society's immense pressure to succeed.

Second, Chutzpah which means to be bold and audacious, is also important in fostering entrepreneurship in Israel (Senor & Singer, 2009). According to COMAS professor Dafna Kariv, embodying Chutzpah, voicing one's mind and being direct with people will ensure effective communication thereby helping entrepreneurs quickly acknowledge a problem and improve their business model (Leblanc, 2015). Entrepreneur A claims that everybody needs a bit of Chutzpah to open a business. She states that adopting this mentality is similar to saying 'I got a better idea than you do and I do it better' (Entrepreneur A, edited). This chutzpah can be seen everywhere in Israel, from students speaking their minds in classroom environments to employees challenging their superiors (Senor & Singer, 2009; Leblanc, 2015). According to Hofstede's cultural dimensions (2017), Canadians adhere more to authority than their Israeli counterparts due to a greater power distance and are thus not as assertive in their managerial attempts (Appendix E). As such, more business schools should impart interactive workshops where debating with the professor and speaking one's mind is encouraged. The challenge is thus to incorporate a laissez-faire entrepreneurial culture similar to Israel's and encourage schools and businesses to alleviate the stigma associated with failure all whilst challenging authority. Finally, in Canada the visibility and status of entrepreneurship should increase.

#### 5.4 Limitations and Future Research

The study's limitations highlight possible avenues for future research. First, the main limitation identified stems from the study's qualitative approach that limits the generalizability of the findings. This lack of external validity renders the propositions difficult to hold in other contexts, especially those pertaining to military imprinting outside of Israel, where results may vary drastically due to contextual disparities. In order to increase the representativeness and generalizability of the findings, future research could conduct a countrywide mixed method study of Israeli founders and their imprinted experiences thereof. Another important limitation of the research is that temporal variations were not considered due to time and resource limitations. Indeed, the interviews merely spanned thirty minutes to an hour and follow-up interviews or additional surveys were not undertaken. Moreover, the recorded observations did not include the interviewed participants. Since an analysis of the founder's past, present and future behaviour are

important in evaluating the impact of imprinting forces, future research should conduct a study of Israeli founders over a period of time in order to evaluate in depth the role of prior experiences on the future behaviour and trajectory of individuals. Due to data and time limitations, the study could not investigate the impact of learnt behaviours on firm performance. Doing so, however could have served to highlight why practitioners should care about organizational imprinting. As such, it is evident that a more concise thesis would incorporate such elements into the research method.

Furthermore, my limited sample size produced many limitations for the study. A sample bias ensued whereby an unequal amount of Israeli and foreign-born entrepreneurs were interviewed. To limit further biases, an equal amount of female and male respondents were chosen in order to increase the diversity and representativeness of the study. The sample size was also a limitation as merely eight individuals were interviewed, which limits the study's validity as well as the extent to which commonalties and differences could be observed across the data. Further studies could thus incorporate a wider and diverse set of Israeli entrepreneurs including minorities, and participants with different religious affiliations (etc.). Respondent biases must be considered in every study as answers may vary depending on a respondent's recollection and perception of events as well as one's hesitancy to divulge certain information. Since one's prior experiences can be considered a personal matter, this study was evidently riddled with such biases. The selection of participants based on convenience could also serve as a notable drawback. Other limitations include the inability to conduct face-to-face interviews that could allow for better data extraction and unexpected interview recording failures. Finally, the interviewer's inexperience and observer biases also undoubtedly affected the quality of the findings.

Whilst this thesis has attempted to study the role of prior experiences in influencing the entrepreneurial behaviour of Israeli founders, future research should analyze how imprinted experiences can influence the opportunity-recognition and decision-making process of founders in Israel. At the firm level of influence, scholars should observe how entrepreneurs incorporate key entrepreneurial processes into the firm. Entrepreneurial companies are characterized by a firm's ability to take significant risks, uphold continuous innovation and pursue new business opportunities in a proactive manner (Lumpkin & Dess, 1996). An organization's entrepreneurial orientation (EO) encompasses all three dimensions and generates many potential benefits for start-up firms (Lechner & Gudmunddson, 2014; Covin and Lumpkin, 2011). EO facilitates a firm's creative process, stimulates the formulation of new ideas and improves a firm's competitive

advantage (etc.) (Lechner & Gudmunddson, 2014). Since EO is often correlated with a firm's growth (Zehir et al, 2015), analyzing how imprinting outcomes can prompt entrepreneurial-oriented firm behavior would be relevant in predicting the success of new business ventures. Moreover, attention should be allotted towards analyzing situations of failure in which certain prior experiences have not been successfully imprinted onto the founder. This can help researchers understand why certain experiences are imprinted onto founders and not others, thus shedding light on imprinting mechanisms and the importance of agency. Furthermore, scholars should also extend theory on organizational imprinting to include the formative experiences of Arab entrepreneurs in Israel who have been largely ignored by scholars.

## **Chapter 6 – Conclusion**

Undergoing an entrepreneurial revolution in the least likely of places, Israel has turned adversity into opportunity by proactively introducing new technologies and continually reinventing itself as a nation. The country's high-tech cluster has forged a rich entrepreneurial ecosystem in the region, rivaling that of Silicon Valley (Senor & Singer, 2009; Tella & Snively, 2016). Israel, commonly referred to as the Start-Up Nation, is characterized by a high level of entrepreneurial activity, with most of its efforts being directed towards the high-tech industry (Aharoni, 1998; Carmel 2015). The country's environmental context aligns with the entrepreneurial culture (Isenberg, 2010), where immigrants and military servicemen alike can take part in Israel's entrepreneurial narrative. Analyzing the prior experiences of Israeli founders offers a glimpse into the context of Israel and sheds lights on the stories and experiences of Israeli entrepreneurs who dared to dream big.

This study responds to the scarcity of research investigating the role of imprinting in the development of entrepreneurial typologies (Chell, 2008; Marquis & Tilcsik, 2013). Imprinting as a core concept in organizational behavior is used to understand how the past interacts with the present (Stinchcombe, 1965; Boeker, 1989; Marquis & Tilcsik, 2013). Whilst prior research mainly draws attention on the imprinting effects at the level of the organization (Marquis & Tilcsik, 2013), I have attempted to uncover how prior experiences, both positive and negative, affect the skills, dispositions and behaviors of individual founders living in Israel. A firm's inception is argued to be a time-sensitive period where entrepreneurs are more likely to draw from elements of their environment including past experiences (Johnson, 2007; Marquis & Tilcsik, 2013). This is done in order to mitigate uncertainties of newness (Stinchcombe, 1965:). I have sought to investigate how salient experiences in one's life can exert lasting influences on individual behaviours. Evaluating past micro and macro contexts in which the individual is embedded and considering individual traits that accommodate those contexts can serve to explain how and why individuals carry imprints with them across organizations.

This thesis endeavored to extend theory on organizational imprinting to include contextual experiences and entrepreneurial typologies. The behavourist trait approach to entrepreneurship was utilized in order to construct the Israeli entrepreneurial profile (Filion, 1998; Chell 2008) According to the literature review, the ideal profile of the entrepreneur reflects characteristics such as risk-taking, locus of control, need for achievement, self-confidence and innovativeness, all of

which are argued to prompt entrepreneurial-oriented behaviours (Schumpeter,1934; McClelland, 1961; Mueller & Thomas, 2000; Chell, 2008). Observing how past imprinted experiences can yield such behaviours highlights the importance of contextual factors and social processes in fostering entrepreneurship. Using grounded theory allows for a more holistic appraisal of entrepreneurs living in Israel and serves to provide an authentic account of the entrepreneur's interactions with his/her environment (Glaser & Strauss, 1967). Eight relevant sources of imprint were identified among the interviewed participants, two of which are new sources of imprint untapped by researchers. Indeed, uncovering immigration and military services as sources of imprint has extended existing theory on organizational imprinting to include more diverse and country-specific experiences.

Investigating the past narratives and idiosyncratic knowledge of founders can generate a wide array of present and future consequences for organizations, as the past can serve to influence not only the present and future behaviours of entrepreneurs but also the entrepreneurial actions they direct (Aldrich & Cliff, 2003; Marquis & Tilcsik, 2013). Indeed, the past trajectory of entrepreneurs can influence the decision-making process, opportunity recognition, resource mobilization and leadership preferences of new business ventures that can impact firm performance (Boeker, 1989; Higgins, 2005; Johnson, 2007; Mathias et al, 2015). Prior experiences may also influence the start-up's organizational culture and structure since the routine processes and basic assumptions established at the founding phase persist over time (Stinchcombe, 1965; Boeker, 1989; Marquis & Tilcsik, 2013). It is hence paramount to understand the environmental factors that can influence entrepreneurial behaviours and actions, as these imprinted influences persist despite subsequent environmental changes thus demonstrating that imprinting forces can encourage or limit strategic change (Marquis & Tilcsik, 2013).

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## **APPENDIX**

Appendix A – Map of Israel



Source: United Nations (2004), Map No.3584 Rev. 2.

## June 23<sup>rd</sup>, 2015: Visiting Shiftech

"Siftech is a start-up accelerator that focuses on economically reviving Jerusalem at its grassroots. The company's vision is centered on reshaping the workspace thereby changing the living realities of the people inhabiting this city in the hopes that Jerusalem can thrive in the business arena. What I especially found intriguing was that one of Siftech's main ingredients for success as the first start up accelerator in the city was its ability to foster successful network connections, especially within the academic world. Their aim to reach students across various institutions and to initiate them to the start-up scene is very promising for the city's future economic standing. Siftech's emphasis on collaboration is central to foster better relations between entrepreneurs, mentors and students. It offers a communal space where university students and entrepreneurs alike can set up the proper infrastructure needed for innovation to make Jerusalem a vibrant start up scene."

[Sophie Leblanc, 2015]

## June 25<sup>th</sup>, 2015: Hacakthon Event

"When I was first introduced to the Hackathon, I mentally pictured a seminar event where each student had to pitch a start-up idea in the middle of the desert. In reality it turned out to be group discussions on the topic of pains, gains and needs with several presentations in the midst of it. The main event that night for me though was the awe-aspiring presentation by Mr. Sarusi. One of the things that surprised me the most about his presentation was how failure did not appear to be an option and the extent to which he was a pioneer in modern technology. However, I could not grasp my mind around his latest project, alike to Google glasses. I had an interesting discussion with my fellow classmates and Israeli mentors that night on the future of technology.

[Sophie Leblanc, 2015]

## June 28<sup>th</sup>, 2015: Visiting Tracx

"In terms of future career opportunities Tracx is probably the most attractive company to work for. The firm specializes in analytics and data mining and serves as a social media platform for established businesses such as Coca-Cola. Due to the fickle and unforgiving nature of the Internet, managing one's image online is paramount to ensure that the customers' image of your brand isn't tarnished. Social media sites such as Twitter, Facebook and Instragram (etc) can drastically have an impact on the user's interaction with given brands. Tracx offers an impressive solution for this by cataloguing all the activities of a company online in an effort to measure the impact the brand has on its clients. I was thus surprised at the extent to which companies can trace your content and whereabouts online as Trax evidently does. Much like Rep'nUp has already acknowledged, it is difficult managing one's impression on the internet since inappropriate content is not always evident. For big companies that deal with tremendous amounts of data, it is paramount for them to have a platform where such information can be disclosed. Electronic word of mouth (eWOM) through the use of online social networks can no longer be overlooked by managers worldwide."

[Sophie Leblanc, 2015]

Source: Leblanc, S. (2015). Personal Blog. Campus Abroad: Israel. HEC Montreal & COMAS: Israel.

<sup>&</sup>lt;sup>18</sup> These field notes have been submitted to the professor in charge of the 2015 Israel Campus Abroad program as a classroom assignment. They are direct quotations from my personal blog.

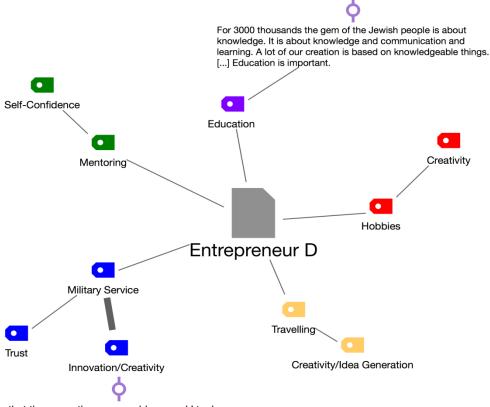
## Appendix C – Preliminary Interview Question Guide<sup>19</sup>

- 1. Please introduce yourself.
- 2. Can you describe your current business endeavor?
- 3. What are certain characteristics and qualities that you assign to successful entrepreneurs?
- 4. What kind of training or qualifications do you have as an entrepreneur?
- 5. What are your strengths and weaknesses as an entrepreneur?
- 6. Have certain past experiences influenced you as an entrepreneur? Please elaborate on those experiences.
- 7. How have such experiences shaped you as the entrepreneur you are today? (Have they provided you with specific skills, social assets, etc.?).
- 8. Do you deem some of these experiences more influential than others? If so, why?
- 9. Why do you think entrepreneurship in Israel has been so vibrant? In your opinion, how does entrepreneurship in Israel differ from that of other countries?

-

<sup>&</sup>lt;sup>19</sup> Follow-up question not included.

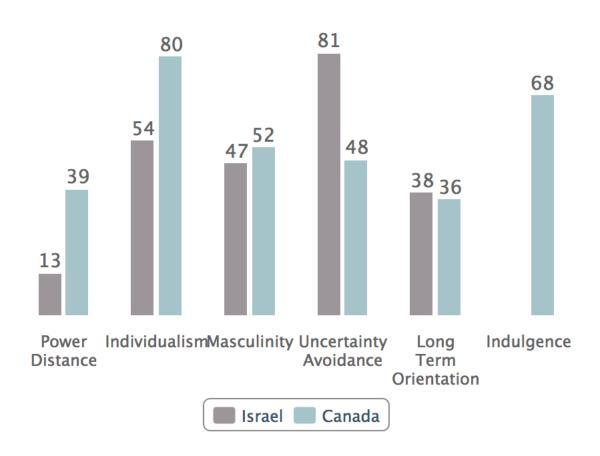
# One-Case Model Entrepreneur D



I saw that there was the same problems and I took my experience from there and built something that was based on my former knowledge of technology from the army. [...] I learned to think differently when I was there.

Source: Leblanc, S. (2017). Data generated from MAXQDA.

**Israel** in comparison with Canada



Source: Hofstede, G. (2017). Israel. Itim International, 1967. Web. Retrieved from https://geert-hofstede.com