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Abstract
Prisoners are assets for a state that can add economic value to the state. There is a growing movement of preparing offenders for returning to communities as it’s a demanding task for ex-prisoners. Applying a framework of entrepreneurial training on inmates will lead to human resource management as employment affects recidivism and self-employment is sustainable. A conceptual framework based on extensive literature is proposed to understand the effect of entrepreneurial training on prisoners. Entrepreneurial training affects entrepreneurial self-efficacy leading to a domino effect on perceived behavioral control and chances of venture creation. This effect is mediated by the strengthening of entrepreneurial resilience. Additionally, gender also affects the perceiving of entrepreneurial training. This framework aids in establishing understanding at the theoretical level as well as can be adopted empirically. This will contribute towards a better judicial system that fosters less burden on the state.

Keywords: Entrepreneurship, Human Resource, Prisoners, Prison management.

Introduction
W. Edwards Deming (2012) says “If you do not know how to ask the right question, you discover nothing.” This rings true for human management in prison. We, as researchers, should understand the experience prisoners go through during their sentence and then modify that experience to facilitate them after sentence. A criminal record in your cap lessens opportunities and decreases the perceived employability of incarcerated people (Graffam, Joseph, Shinkfield & Hardcastle, 2008). For state, policymakers, educators, researchers, and businessmen, entrepreneurial thinking and actions is an important question to ponder on, whether undertaken within an organization or individually (Hisrich, Langan-Fox, & Grant, 2007; Uy, Chan, Sam, Ho, & Chernyshenko, 2015). Entrepreneurship has risen as the most compelling economic force the world seems to see (Kuratko, 2005). Entrepreneurship has been defined by Shane (2012) “as the process

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of discovery/co-creation, evaluation, and exploitation of opportunities to produce goods and services.” Entrepreneurial ventures can be potentially successful because of few dispositional and environmental factors. Mostly, entrepreneurial skills are underscored as a general skill set required for entrepreneurship (Savickas et al., 2009).

It has been established in the literature that people can become self-employed for their positive career orientation as a means to steer vital changes in society (Newman, Obschonka, Schwarz, Cohen, & Nielsen, 2019). One such self-employment can be or more so, should be by ex-offenders. Learning Model for prisoner assimilation is a proposition that aims at bringing change in the lives of prisoners by imparting life skills including self-awareness/ personal skills, rational thinking skills, social skills/ inter-personal skills, academic skills/ scientific thinking skills, and vocational skills (Arifin, Syam, & Maladi, 2015). A learning model that incorporates entrepreneurial training acts as community-wide preferment of reintegration of ex-offenders through gainful employment (Graffam, Joseph, Shinkfield, & Hardcastle, 2008).

History

London Bride Well House was a pioneer in bringing about reforms in prisons back in the 17th century by giving the idea of a correctional facility, not an imprisonment infrastructure (Anwar, & Shah, 2016). The idea of prisoners as an entrepreneur is not new. Sonfield (1992) proposed the idea of entrepreneurial training for inmates with their sentence about to end, to reduce recidivism and opportunity for self-employment. Regardless, the research of systematic entrepreneurship is lacking to date (Lockwood, Teasley, Carland, & Carland, 2006). Kubberød & Pettersen (2017) reported in their study that entrepreneurial skill imparting in form of education or training facilitates entrepreneurial self-efficacy (ESE) among students (Gielnik, Uy, Funken, & Bischoff, 2017; Nowiński, Haddoud, Lančarić, Egerová, & Czeglédi, 2017) as well as in general population (Kerrick, Cumberland, & Choi, 2016). Lee, Hallak, & Saradshmukh (2016) stated in their research that educators in entrepreneurship use persuasive techniques by motivating individuals on their social context which helps increase ESE. Moreover, Lee, Hallak, & Saradshmukh (2016) established that the entrepreneur’s lifestyle helps them better cope with their adversity at venture creation and management, which is characteristic of entrepreneurial resilience (ER). Both these statements are well applicable to prisoners as someone who has lived through a conviction period in jail has the resilience to sustain other hurdles (Buang, 2012).

A study conducted in 2015 reported that taught-entrepreneurial skills, support in venture development, supports the positive relation to ESE and ER across different settings (Saeed, Yousafzai, Yani-De-Soriano, and Muffatto, 2015; Boukamcha, 2015; Hodzic, Ripoll, Lira, & Zenasni, 2015). Specifically, if the light is shed upon prisons, there is a growing movement of preparing offenders for returning to communities (Melossi, 2015) as adjusting to the outside world is an extremely demanding and consuming task for ex-prisoners (Qasim, & Webster, 2018).

Arifin, Syam, & Maladi, (2015) conducted a study in Malaysia on applying a framework of entrepreneurial training on inmates in prisons as they identified that although skill-training has become a routine activity by the government, criminals opt for criminal-activities again once free. They identified two underlying causes; (i) training programs
make them acquire skills but the job market does not welcome prisoners and (ii)
constraints of capital and knowledge of running a venture. Arifin, Syam, & Maladi (2015)
mentioned that before launching entrepreneurial training, few quantitative variables were
studied including Self-efficacy (Toma, Chirita, Sarpe, 2011), Resilience (Sonfield, 2008),
and Perceived behavioral control (PBC) (Khan, Ahmed, Nawaz, Ramzan, 2011). Based
on this study, and the need for theoretical insight, it can be established that studying ESE,
ER, PBC and the Chances of venture creation (CVC) will help in clearing the air
regarding the status of entrepreneurial spirit in prisons of Pakistan.

Significance
Prison reforms in Pakistan were initiated after the foundation of the ‘Punjab Jail
Reforms Committee’ was put on October 4, 1950 (Anwar, & Shah, 2016). Regardless of
reforms initiation approximately 70 years ago in Pakistan, previous research (Kashif, &
Akhtar, 2020) and the personal experiences of the researcher-led to identifying the gap in
the literature and hence, lack of policy regarding need for entrepreneurial skills. Visiting
Adyala jail in Punjab and Mach jail in Baluchistan led to the understanding that skill-
training was conducted for electrician course, carpenter course, computer course, tailoring
course, etc. for males whereas tailoring course & makeup-hairstyling course for females.
While visiting, unstructured conversations in between researcher and inmates with less
than 7 months of conviction sentence, led to the recognition of the vital need to impart a
crash course for running a venture post-release. An excerpt from one of the conversation
sums the need, stating ‘We are taught different skills and different pieces of training are
conducted for us to earn a better living outside of jail walls, but we are not allowed to be
employed with the tag of being a criminal once and starting our own business is not an
option because we lack a basic sense of running a business. We easily face fraud or may
work for below minimum wage, because the other person knows our lack of

Approximately 650,000 prisoners are released each year, with 2/3rd returning within
two to three years (Prisoner Reentry Institute, 2006; U.S. Dept. of Justice, 2007). The
rate of recidivism is high because of the great difficulty former inmates have in obtaining
employment. Refusal and unacceptance at the hand of society towards former prisoners’
forces to look for shortcuts and revert to their old ways of committing crimes (Arifin,
Syam, & Maladi, 2015). Moreover, 59% of Muslim prisoners, aged between 15–29 years
are to be released back into society after their conviction sentence. This demographic
profile of prisoners reiterates the association of criminality with young facing economic
deprivation (Allen, & Watson, 2017). Moreover, as prisoners experience existential
vacuum due to lack of meaning and purpose of life causing destructive behavior, programs
like entrepreneurial training help in channeling the frustration and giving a sense of
direction (Powell, 2017).

This crucial indigenous deficiency of no theoretical understanding leading to no
empirical assessment in the literature indicates a weak system. This research aims at
allocating the missing piece to initiate the rehabilitation procedures through
entrepreneurial skill training.
Objectives

Firstly, the research aims to add clarity and nuance between different concepts in their theoretical linkage for Pakistani inmates. Secondly, the research signifies the leverage on prior work in foreign literature related to theoretical underpinnings in inmates and applying it on Pakistani context as prisoners are assets for a state and if governed properly, will positively impact economic value to jails, community, and state (Arifin, Syam, & Maladi, 2015). Thirdly, studying the said variables in the marginalized population such as inmates initiates the nomological net required to incorporate entrepreneurship in inmates-related studies. By focusing on sustainability and self-employment of inmates, we highlight the potential shift of inmates from state to self and help inmates to be absorbed back in the society by engaging in entrepreneurial endeavors, once released (Qasim, & Webster, 2018).

Defining variables

1. Entrepreneurial Self-Efficacy.

It is largely accepted that Entrepreneurial self-efficacy (ESE) referred “to an individual's belief in his/her capability to perform tasks and roles aimed at entrepreneurial outcomes” (Chen, Greene, & Crick, 1998) are critical in pursuing entrepreneurial careers and engaging in venturing. ESE has been studied at both levels; global and domain-specific. Former is named as general self-efficacy, defined as a global belief about one's capabilities to solve future tasks of any kind) to understand its effects’ (Scholz, Gutiérrez-Doña, Sud, & Schwarzer, 2002). Whereas the latter is defined as ‘targeted towards a certain behavior or outcome such as one's career or creative tasks’, consistent with conceptualization by Bandura (1997).

Lent, Brown, and Hackett (1994) gave the social cognitive theory of career and academic interest, choice, and performance and emphasized that self-efficacy is occupation-specific and one such domain is ESE. Self-efficacy and its derivatives such as ESE are rooted in the social cognitive theory by Bandura (1997, 2006), Ajzen’s (1991) theory of planned behavior and have a basis in agency perspective that understands entrepreneurial beliefs and actions (Frese, 2009). Dmowski, Wincent, and Cardon (2010) understood how ESE forms and develops in an individual through mediated learning and social persuasion, in turn, strengthen by education and training to influence ESE. Apart from these theories, Self-regulation theory (Shepherd, Patzelt, & Baron, 2013), effectuation (Engel, Dimitrova, Khapova, & Elfring, 2014) and regulatory focus (Cooper, Peake, & Watson, 2016) provide alternate explanations of ESE.

ESE nurtures entrepreneurial behavior by amplifying entrepreneurial intentions (Chen, et al., 1998). Miao, Qian, and Ma (2017) determined that ESE is a significant psychological construct encompassing its effects on internal factors such as entrepreneurial intention and motivation, on external factors such as entrepreneurial behavior and performance, and a crucial result of entrepreneurship education and skill training. Detailed research on antecedents have been done over the years to understand what fuels ESE: (1) Work experience including entrepreneurial experience, work experience as employee and leadership experience (Hockett, 2017; Lee, Hallak, & Sardeshmukh, 2016). (2) Education and training includes entrepreneurial education at school level, entrepreneurial training at vocational institutes and institutional supports (Kerrick, Cumberland, & Choi, 2016;
Venugopal, Viswanathan, & Jung, 2015; Zhao et al., 2005), (3) Role models and mentors including family members, general population, field experts, network ties and mentoring (BarNir, Watson, & Hutchins, 2011; Huyghe, & Knockaert, 2015), (4) Individual characteristics including gender, risk-taking preferences, cognitive styles, entrepreneurial passion, personality type and trait, need for achievement, locus of control and career adaptability (Wennberg, Pathak, & Autio, 2013; Biraglia and Kadile, 2017), (5) Firm characteristics including strategic orientation, entrepreneurial culture, decision-making processes and marketing capabilities (Cooper et al., 2016; Snell, Sok, & Danaher, 2015), (6) Cultural and institutional environment including environmental dynamism, performance-based cultural norms and socially supportive environments (Hopp, & Stephan, 2012); Luthans, & Ibrayeva, 2007). Antecedents lead to consequences, which too, have been well researched: (1) entrepreneurial intentions (Vanevenhoven & Liguori, 2016; Sieger & Monsen, 2015), (2) entrepreneurial emotions/mental state including positive emotions, positive situational framing, resilience, entrepreneurial passion, a conviction in judgement and moral disengagement (Uygur, & Kim, 2016; Dalborg & Wincent, 2015), (3) Entrepreneurial behavior includes planning, opportunity recognition, task effort, financial investment, goal commitment, and persistence (Brinckmann, & Kim, 2015; Trevelyan, 2011), (4) Entrepreneurial performance includes financial profitability, growth based on revenue and employment and innovation (Hallak, Assaker, & Lee, 2015; Hmieseski & Baron, 2008) and (5) venture creation (Miles et al., 2016; Hopp, & Stephan, 2012). Research has also considered ESE as a moderator to any relationship and it was established that ESE sustains a constructive effect on entrepreneurship training and passion, hence, fostering chances of venture creation (Gielnik et al., 2017; Prabhu et al., 2012).

Hence, with the growing interest in ESE on its effects on paving career and vocational actions, it has become relevant to researchers, policymakers, and the state as a whole (Obschonka, Hakkarainen, Lonka, & Salmela-Aro, 2017; World Economic Forum, 2009).

Proposition 1: Entrepreneurial training increases Entrepreneurial self-efficacy.

Entrepreneurial Resilience.
Entrepreneurial resilience (ER) plays an important role in the attitude towards venturing as career orientation. The word ‘resilience’ originated as a Latin (verb) “resilience” meaning “to leap back”. Masten (1989) viewed resilience in 3 ways; good outcomes in high-risk situations, competency under stress, and coping with trauma. Buang (2012) found that even by the year 2012 there was no term specified for resilience among entrepreneurs. ‘Business resilience’ i.e. ‘business organizations’ performance’ and ‘emotional resilience i.e. ‘adapting to stressful situations’ were two terms closest to ER. Buang (2012) synthesized the concept of entrepreneur resilience, cross fields from psychology to management. In psychology, resilience is defined as the capacity to positively cope with negative events (Fletcher, & Sarkar, 2013) whereas, in management sciences, resilience was used in terms of hardiness (Bernard, & Barbosa, 2016). ER is defined as “the ability to cope well with high levels of on-going disruptive change of the surroundings towards business by bouncing back with acceptable means to overcome business adversities while sustaining good health and energy” (Buang, 2012). ER has 3 major components; Self (internal strengths), Business situational-cognitive abilities
(cognitive competence), and Business social-relational abilities (social competence). Whereas, Adeniran and Johnston (2012) defined ER as ‘the ability to withstand and quickly overcome adversity while driving to establish a venture’. This is similar to the definition by Bullough and Renko (2013).

The concept of ER is used across different disciplines yet its theoretical understanding is inadequate (Richardson, 2002). Few of the theoretical perspectives include the family adjustment and adaptation response model (Patterson, 1988), and the grounded theory of personal resilience (Ponomaros, & Holcomb, 2009). The idea of ER is based on the model of ‘Successful Start-up Business Model’ (Baron, Frese, & Baum, 2007). The model consists of 2 foundations; basic foundations that lead to proximal foundations. Basic foundations include (1) personality characteristics and cognitive capabilities, (2) psychological capital including optimism, perseverance, and fitness, (3) Human capital including expertise, experience, education, knowledge, and skills. The proximal foundations include (1) the internal state of psychology, (2) cognition, and (3) the action process. Both of these foundations effects resilience, self-efficacy, and hopes to start a new venture (Brooke, 2004; Luthans, 2004; Luthans, 2007).

Another model for resilience that aimed at a holistic description of the concept is ‘the resiliency model’ by Abebrese (2015). This model argues that resilience is a process of an individual in a comfortable zone, that experiences adjustment for reintegration due to a disruptive experience. This process results in any of the following outcomes; resilient integration (reintegration with protective factors intact), homeostatic reintegration (reintegration in the comfort zone), reintegration with loss (reintegration with protective factors lost), and dysfunctional reintegration (destructive behavior instead of adjustment).

ER can be characterized as a dynamic organizational process that involves adaptation to harsh external conditions and a destabilized marketplace (Bernard, & Barbosa, 2016). Denz-Penhey and Murdoch (2008) researched that an entrepreneur high in ER welcomes and works with the change to achieve mandated goals. This is because of the high tolerance to ambiguity. Weiner (1985) gave the attributional theory that states ER to be a motivational construct that helps in giving meaning to an event. Morrise and Ingram (2016) characterized a resilient entrepreneur with 3 characteristics; Hardiness i.e. the ability of an entrepreneur to exercise personal control self-sufficiently, Resourcefulness i.e. the skill, capacity, and resources possessed by the entrepreneur to manage adverse conditions, and Optimism i.e. the capacity of the entrepreneur to have a positive attitude despite difficult circumstances. Apart from these 3, Bulmash (2016) stated that the capacity to make realistic plans, positive self-image, self-confidence, and communication skills are also characteristics of ER. Additionally, Bullough, and Renko (2013) showed in their study that the ER is also linked to failure management and innovation, which helps in re-entry to the entrepreneurial ecosystem.

Hence, the importance of ER to be present and studied in the prison population is mandatory as all characteristics of ER work parallel to ex-offenders.
Proposition 2: Entrepreneurial training increases Entrepreneurial resilience.

Perceived Behavioral Control.

Perceived behavioral control (PBC) is a part of the theory of planned behavior by Ajzen (1991). It was originally defined as ‘people’s perception of the ease or difficulty of performing the behavior in question’. Mathieson (1991) defined PBC as ‘the individual’s perception of his/her control over the performance of the behavior’. This defining statement included the perception of requisite resources whether present or absent (Ajzen and Madden, 1986). In 1992, Doll and Ajzen redefined PCB as ‘the perceived ease or difficulty of performing the behavior and is assumed to reflect experience as well as anticipated impediments and obstacles. Sutton (2001) defined it as “people’s perceptions of their ability to perform a given behavior”. Trafigore, et al. (2002) proposed two defining components of PCB; perceived control and perceived difficulty. Similarly, Karft, et al. (2005) proposed that PBC has 2 components; self-efficacy and controllability. Later, Murphy (2009) gave his definition of PCB as ‘one’s perception of how easy or difficult it will be to carry out the intended behavior.’ Amirlault, et al. (2008) assumed PBC as a multidimensional concept. Internal factors including self-efficacy and external factors include facilitating conditions, resource-availability, and government support.

PBC has been researched for years since its inception in 1991. Beale and Manstead (1991) researched that PBC significantly contributes to predictions of chances of venture creation. Moreover, PBC has been found to independently contribute to entrepreneurial intentions (Nwankwo, Kanu, Marire, & Balogun, 2012; Zhao, Seibert, & Hills, 2005). It has also emerged in the literature that PBC triggers the likelihood of being an entrepreneur (Peterman, & Kennedy, 2003; Krueger et al., 2000) and chances of venture creation (Kautonen et al., 2013; Liñán, & Chen, 2009). Whereas, entrepreneurship training an education effects PBC in an individual aspiring to be an entrepreneur (Schlaegel, & Koenig, 2014; Ferreira, & Fernandes, 2012). DINC & Budic (2016) put forward that PBC has a significant and positive effect on entrepreneurial intentions and the chances of venture creation.

Similarly, Fellnhofer (2017) presented the results of his study that PBC is malleable and modifiable by the provision of entrepreneurial knowledge and perspectives via sharing of entrepreneurial experiences in most of the settings. It was further presented that it was not a specific course outline that affected PBC and ESE, rather the entrepreneurial perspective through role models. This was consistent with the research by Robinson (2010) that also asserted that it’s not only the entrepreneurship knowledge but also teaching coping strategies on how to accept failure and deal with it through critical thinking.

Hence, it will not be an understatement to presume that entrepreneurial training with storytelling will increase the chances of venture creation among any population, may it be prisoners.
Proposition 3: Entrepreneurial training increases perceived behavioral control.

Chances of Venture Creation.

Chance of venture creation (CVC) is the probability of starting one’s venture based on all these quantitative variables of the model discussed above. CVC is not a specified variable in the literature, nor this study. It is only the likelihood of venture creation in the future. It signifies the presumed effects of ESE, ER, and PBC across a prison setting. As discussed above in each variable distinctively, across literature chances of venture creation has been discussed as an outcome of ESE, a higher chance with ER and facilitated by PBC. Keeping in mind the effects of all the variables under study and the aim of introducing entrepreneurial training in prisons, chances of venture creation is added as an overarching outcome every stakeholder will look forward to.

Proposition 4: Entrepreneurial training increases the chances of venture creation.

Role of Gender.

The last decade of research indicates lower levels of ESE and PBC in females on average (Díaz-García & Jiménez-Moreno, 2010; Wilson, Kickul, Marlin, Barbosa, & Griffiths, 2009). In 2013, Maritz and Brown found that females had higher levels of ESE but Shinar, Hsu, & Powell (2014) proved in their research that males have more self-assuring ESE beliefs than females. Dempsey and Jennings (2014) found that gender had no significant differences in ESE and PCB. Whereas, Venugopal, Viswanathan, and Jung (2015) asserted that women have higher ESE and chances of venture creation if provided the required entrepreneurial training. Same mixed results with inconclusive moderating effects of gender can be seen across all studies on all settings on the relation of ESE, ER, PCB, and CVC (Huis, Lensink, Vu, & Hansen, 2019; Hill, & Akhrass, 2018; Ratten, 2017; Henry, Foss, & Ahl, 2016).

Proposition 5: Gender moderates the relationship between Entrepreneurial self-efficacy, Entrepreneurial resilience, perceived behavioral control, and chances of venture creation.

a. Working Relationship among Variables

Although the relationship among variables has been discussed separately for each variable above, the comprehensive crux of all the variable relation is described for ease of understanding. Extremely poor conditions regarding unemployment prospects either a cause or effect of the offensive behavior and the leading imprisonment is a debatable point but the re-entry to society has an attached stigma, prison record, psychological and social problems (Petersilia, 2003). For prisoners, it has been seen that self-employment helps in overcoming and coping with attitudinal changes that accompany re-entry and also help in building a better future (Haynie, & Shepherd, 2011). These problems demand a human resource development and management plan inside the prison to minimize these issues. A Finnish study conducted in 2016 showed that employment has a limited effect on recidivism and desistance processes because most offenders are not offered job security and are not sustained for long (Aaltonen, 2016). Entrepreneurship programs at prisons use an
“inside-out” strategy i.e. to work on offenders behind bars, which will help in post-release adjustment (Empowering Innovation, 2015).

The research found that ESE led to a stronger conviction in ER and venture creation at individual levels (Gielnik, Uy, Funken, & Bischoff, 2017; Uygur and Kim, 2016). A group of researchers has highlighted key mechanisms between ESE, PBC (Tsai, Chang, & Peng, 2016), and venture creation (Arshad, Farooq, Sultana, & Farooq, 2016). Parallel to the theory of planned behavior, research established a significant positive relationship between ESE and CVC in all types of students and the general population (Bacq, Ofstein, Kickul, & Gundry, 2017; Hockerts, 2017; Zhang & Cain, 2017; Austin & Nauta, 2016; Geenen, Urbig, Muehlfeld, van Witteloostuijn, & Gargalianou, 2016; Horvath, 2016). These relations are not only assessed in developed countries but also developing countries like Pakistan (Biraglia & Kadile, 2017; Farashah, 2015).

b. Theoretical Basis

Focusing on the effects of entrepreneurial training on chances of venture creation and the intention to work towards self-employment can be explained through Institutional theory. Institutional theory built on how countries have different approaches to economic activities (North, 1990) Theory further develops on how many states and its policymakers are conducive to entrepreneurship (Whitley, 1999). Minniti (2008) further build on the pillars of institutional theory and emphasized government policies that focus on entrepreneurship as it promotes innovation and helps in the reduction of unemployment, combatting through self-employment (Walter, & Block, 2016).

Several theoretical perspectives are identified in the literature that establishes ESE as a construct and how it affects entrepreneurial outcomes. ESE emerges from the broader concept of self-efficacy that was defined by Bandura (1997) in his social cognitive theory, which encapsulates the effects of social context on self-efficacy. Self-efficacy, may it be general or domain-specific, asserts that individuals interact with internal and external environments reciprocally (Bandura, 2006). Frese (2009) states that self-efficacy is a major component theoretically to explore entrepreneurial actions and their influence on a range of career choices. Desimone (2006) proposed the Human Resource Development model as the means used to support human resource management. Whereas Noe (2007) interpreted the human resource development model as a way “to prepare our employees for career advancement and to face new challenges” i.e. exploiting one’s capability to entrepreneurship. Drnovšek, Wincent, & Cardon (2010) stated the antecedents of ESE as mastery experiences, social persuasion, vicarious learning, and physiological states. Whereas decades of research on outcomes of ESE supports Ajzen's (1991) theory of planned behavior. It explains the emergence of entrepreneurial actions such as chances of venture creation, venture growth, and perceived behavioral control (Krueger, Reilly, & Carsrud, 2000). This theory proposes that PBC influences the behavior of CVC as it not only focuses on the motivation to perform entrepreneurial action but also on the difficulty associated with it. This can be further developed through experience sharing and entrepreneurial training (Autio, Keeley, Klofsten, Parker, & Hay, 2001; Krueger et al., 2000; Autio et al., 1997). Ogundoye, McEachern, and Kane (2017) and Fatokki (2018) found that resilience mediates the chances of the venture and then good performance later. All these pathways are influenced by work/start-up experience, education, and
training (Newman, Obschonka, Schwarz, Cohen, & Nielsen, 2019). Research in the previous decade indicated no significant effect of gender on ESE (Mueller & Dato-On, 2008). But recent research establishes that gender has an overall effect on ESE with the assertion that females on average have lower levels of ESE than males (Dempsey & Jennings, 2014). Whereas, when gender is taken as a moderator on entrepreneurial education/training and ESE, the literature is inconclusive (Shinnar, Hsu, & Powell, 2014). Newman, Obschonka, Schwarz, Cohen, & Nielsen (2019) reported in their systematic review that all these relational pathways can be observed in many settings such as in academia, organizations, rehabilitation, and even in prisons.

Proposition 6: High Entrepreneurial self-efficacy increases Perceived Behavioral control.

Proposition 7: Entrepreneurial resilience affects the relationship between Entrepreneurial self-efficacy to Perceived behavioral control and indirectly affects the chances of venture creation.

Proposition 8: Higher entrepreneurial self-efficacy, with entrepreneurial resilience increases, perceived control behavior that surges chances of venture creation.

Proposition 9: Human resource management is plausible through entrepreneurial training to prison inmates as it increases entrepreneurial self-efficacy leading to an increase in perceived behavioral control and chances of venture creation, effected by entrepreneurial resilience, regardless or differently of gender.

Figure 1. Framework
Discussion

Becker (1963) stated that those who have been in contact with the criminal justice system are termed as deviant by society and altering the world outside of prison becomes an extremely challenging task for former prisoners (Pager, 2003). Several prisoners have documented in their autobiographies, ‘lost time cannot be recaptured’ (James, 2005). Similarly, Bushway (2011) reports in his study that search for employment for ex-offenders is difficult as the chances to find job stability and good earnings are less and leads to people engaging in crime. Miller (2014) correctly proposed that the prisoner re-entry programs are ‘more than a collusion between social welfare and criminal justice state institutions to manage urban poverty among marginalized populations.’

The proposed model is an attempt to understand the characteristics of prisoners who are to be re-entered in society. Understanding all these characteristic variables and the role of entrepreneurial training will lead to better human resource management of manpower, which is so far untapped. The model may give a sense of a simplified entrepreneurial environment but it is much more complex than its visual representation. Each variable or component has makeup on its own and encapsulates all the total essence of it. For instance, ESE has its antecedents and expression in any individual. Whereas ER has its defining makeup, it cannot be studied as a stand-alone characteristic in any individual. The same is the case with PBC. PBC is such a complicated variable that it can have a model of its own to explain its presence and absence. Hence, this model is an attempt to cover and discuss all forces at work through easy but thorough understanding.

The working model aims at proposing a human development model as well as a human resource management model to positively direct prisoners once their conviction sentence ends. With entrepreneurial training given to both genders during their sentence, will aid in establishing entrepreneurial capacities of the manpower, leading to reduction of recidivism rate. These entrepreneurial capacities include entrepreneurial resilience, and perceived behavioral control.

Conclusion

Conclusively, the model proposes if there is entrepreneurial training imparted to ex-offenders, the levels of the relationship among variables will significantly be affected, leading to chances of venture creation after completion of sentence. Entrepreneurial self-efficacy leads to better perceived behavioral control and higher chances of venture creation, in presence of entrepreneurial resilience. Whereas, gender plays a moderating role as these variables and their expression are expected to work differently in males and females.

Theoretical & Managerial implication

It’s quite evident via the scarcity of research in forensic sciences across the country that there is a dire need for scientific inquiry. With little literature available in the country context, it can be established that understanding the environment and assessment of entrepreneurial attitude through ESE, ER, PBC, and CVC has to be done to initiate and kickstart research in legal studies related to entrepreneurship and management as a whole (World Economic Forum, 2009). The statistical records of 2015 reported crimes in Pakistan indicating an increase from 633299 to 677554 in 2016 (National Police Bureau,
and the refusal at the job market and society as a whole towards former prisoners makes recidivism a shortcut to earn money for survival (Arifin, Syam, & Maladi, 2015). This increment highlights the utmost necessity of research especially of measuring entrepreneurial potential and imparting entrepreneurial skills to lower rates of reconviction & recidivism in criminal activities.

Moreover, ex-offenders are a human resource, if managed properly, will add to the manpower capacity of a state. A developing country like Pakistan requires skilled, self-sufficient, sustaining individuals to steer the future of the country towards economic growth and propensity. This will contribute towards a better judicial system in Pakistan that fosters less burden on the state and its resources and more sustainability at the individual level (Obschonka, Hakkarainen, Lonka, & Salmela-Aro, 2017).

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