AN EMPIRICAL INVESTIGATION OF THE FACTORS AFFECTING PERCEPTIONS OF UNIVERSITY STUDENTS IN PAKISTAN ON THE USAGE OF ISLAMIC EQUITY CROWDFUNDING

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ABSTRACT

Purpose — This paper aims to explore the key motivational factors that influence investors to invest in Islamic equity crowdfunding (I-ECF) platforms.

Design/Methodology/Approach — The study is quasi-experimental with a pre-test/post-test design where the respondents, including 350 business and computer studies students from public and private universities in Pakistan, were selected for experimental manipulations, i.e., showing videos. The questionnaire was used to assess the difference in the perceptions of potential investors.

Findings — The results support the hypotheses that project innovativeness, return on investment, perceived informativeness, protection policy and a helping attitude positively influence the investors’ willingness to invest in I-ECF. However, risk of investment and third-party seal were proven to play an insignificant role in influencing the investors’ willingness to invest in I-ECF.

Originality/Value — I-ECF is an unexplored phenomenon in Pakistan. This study is limited to finding the key factors that influence students’ inclination towards its usage. Future researchers can study it from an entrepreneur’s perspective.

Research Limitations — This study is limited to potential investors’ perspectives towards the usage of I-ECF platforms. However, various other research areas need to be explored such as entrepreneurial intentions, usage of the capital market, platform and institution-related issues for the promotion of I-ECF.
Practical Implications — This study will have practical implications for young entrepreneurs, regulators and researchers so that they may capitalise and give weightage to key identified factors for the promotion and usage of I-ECF platforms to raise seed money for new businesses. For example, crowdfunding as an alternative method of financing may gain popularity by making hundreds of connections through brand ambassadors. Universities could partner with equity-based crowdfunding (ECF) platforms like StartEngine as their intra-university platforms. Furthermore, the study provides valuable insights to regulatory bodies to assist them in formulating regulations for I-ECF. If startups (e.g., university incubators) get money from students via ECF platforms, ECF will grow into a sustainable model that can contribute to the country’s long-term development by fostering a knowledge economy as a source of wealth.

Keywords — Islamic equity crowdfunding, Personal traits, Platform-related characteristics, Project-related characteristics

Article Classification — Research paper
INTRODUCTION
Entrepreneurship is the key source for creative innovation and development in the world. One of the most common obstacles that entrepreneurs face to put their unique ideas into reality is financing. The sources available to businesses—bank loans or the stock market—can only be accessed at the later stages of development. The situation gets even worse during periods of financial crises. In the 2008 financial crisis, banks’ loan terms and conditions were tightened and banks’ lending suddenly fell by 47 per cent for borrowers and 14 per cent for capital loans (Ivashina & Scharfstein, 2010). Such restrictive banking conditions are unfavourable for entrepreneurial activities. Therefore, there is a dire need for a platform that helps entrepreneurs with the financing of projects.

In this context, equity crowdfunding (ECF) has gained huge popularity in developed countries. It is the practice of funding a project by raising small amounts of money as an investment from a large group of people called the crowd; the collective power of the crowd enables the project to be implemented. The first ECF platform, Kickstarter, was established in 2009, and since its launch 22 million people have backed its projects with 244,228 projects being successfully funded (Kickstarter, 2023). Many crowdfunding platforms are successfully working all over the world; the industry is now mature in developing countries and growing annually. According to data gathered by Finanso.se, the global crowdfunding market maintained its rapid growth in 2020, increasing 23.3 per cent year-on-year and reaching over USD8.5 billion in transaction value. The crowdfunding market is expected to grow to USD300 billion by 2030 (Shepherd, 2020).

Muslim-majority countries have in turn developed an alternative solution, in line with their faith, called Islamic equity crowdfunding (I-ECF). This platform is suitable for generating funds from the crowd for ideas that exclude elements prohibited in Islam. Through this platform, transactions are expected to be fair and the proceeds are invested in ethical and Sharīʿah-compliant businesses. The first I-ECF license was issued in Malaysia in March 2020 to a Singapore-based ECF company, Ethis. It successfully started its operations in September 2020.

In the light of the global success of crowdfunding platforms to support technology startups and the ground realities of developing countries, which face financial constraints in project financing, the Securities Exchange Commission of Pakistan (SECP) granted approval to the first technology-based crowdfunding platform in 2020 to boost startups and promote entrepreneurial activities. I-ECF, if also promoted, would pave the way towards funding Sharīʿah-compliant projects and boost the Islamic economy. The regulatory body is thus working towards developing a crowdfunding regulatory framework in Pakistan.

Most of the existing studies are conducted on charity or reward-based crowdfunding, and limited attention has been directed towards research on ECF. Similarly, there are few studies available on I-ECF which is a new and emerging concept. Moreover, none of the studies on ECF or I-ECF has been conducted in the context of Pakistan. In view of the limited literature available on I-ECF and its related issues, particularly on the factors that influence investors to invest their money via such platforms, this study focuses on the willingness of potential investors—in particular, students—to choose I-ECF to invest. There is already a shift in the role of universities in developing the entrepreneurial spirit and abilities of university students to be successful entrepreneurs. Universities can turn the knowledge they produce into business ideas that can
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easily be applied to the market (Ibrahim et al., 2017). However, seed money is always a great challenge for university startups. Therefore, if startups (e.g., university incubators) get money from students through ECF platforms, a sustainable model could be developed to fund sustainable projects—projects which are developed and funded by university students for the development of successful entrepreneurs—and thus contribute to the sustainable development of the country. In this context, the current study aims to explore the factors that motivate potential investors (students) to invest in I-ECF platforms.

Accordingly, the main objective of this study is to determine the inclination level of potential investors towards the usage of I-ECF through project-related, platform-related and personal traits-related motivational factors and to examine the change in awareness of investors after the introduction of intervention, i.e., a video showcase. The sub-objectives are:

1. To examine the influence of project-related factors, such as project innovativeness, returns and risk of investment, and perceived informativeness of projects on the inclination of potential investors towards usage of I-ECF platforms in Pakistan.
2. To analyse the effect of platform-related factors, such as third-party seal and protection policy of crowdfunding platforms on the readiness of potential investors to invest in I-ECF platforms in Pakistan.
3. To examine the impact of personal traits, such as the helping attitude of investors as motivational factors to push them to invest in I-ECF platforms in Pakistan.
4. To determine the moderating role of interpersonal connectivity with the helping attitude of investors to increase the willingness of investors to invest in I-ECF platforms in Pakistan.

This study provides future implications to I-ECF platforms by capitalising on significant motivational factors to improve the perceived effectiveness of these platforms as an investment avenue for investors. Moreover, this study will help fundraisers or entrepreneurs to shape their projects in the light of influencing factors to attract the attention of potential investors to invest. This study will also help regulators to ponder on suitable regulation of I-ECF in Pakistan, regarding return distribution, level of risk, laws for disputes, protection policies for the information shared, and the rights of investors and entrepreneurs which will boost their performance and facilitate the use of these platforms.

After the introduction section, the following section presents a literature review on the subject discussed. The next sections then discuss the methodology of the study, the results and their interpretation. The last section concludes the study, makes relevant recommendations, and suggests practical implications for future studies.

LITERATURE REVIEW
Crowdfunding platforms facilitate entrepreneurs to generate funding and provide an avenue to investors to invest in innovative business projects in developed countries (Hoque et al., 2018). Crowdfunding platforms such as Kickstarter, Crowdcube, Gate Impact, and Offerboard provide investors with opportunities to evaluate the potential of an idea and then decide on the amount of capital they would like to invest in a project (Andaleeb & Mishra, 2016).
The theoretical foundation of this study is based on the customer value perception model and warm-glow theory. The customer value perception model, developed in 1990, is about the level of satisfaction that a customer feels for a product or service. It is perceived that if a customer’s intended value is high, the customer would be more inclined to use that product or service. Similarly, if potential investors feel satisfied by factors such as innovativeness, risk, return, third-party seal and perceived informativeness, their future perceived consumer value will increase and so will their inclination to invest in crowdfunding.

Warm-glow giving is an economic theory that explains the emotional reward of giving to others. This theory is applied in this study to examine the level of potential investors’ usage of crowdfunding and determine whether it is their helping attitude that pushes them to invest in crowdfunding instead of selecting other available investment options.

ECF is a specific type of crowdfunding in which a fundraiser (normally a startup) launches a crowdfunding project with shares of the business as rewards (Hossain & Oparaocha, 2017). Thus, investors and project supporters invest in the project in exchange for equity (Zhu & Zhou, 2016). There is shared risk in ECF, so it is a natural fit for the Islamic economy, specifically termed as I-ECF or Sharī‘ah-compliant ECF. I-ECF is based on ethical and socially responsible standards which ensure the fair distribution of benefits and obligations among all the parties. This new way of investment can bring about new developments in Islamic finance. I-ECF platforms consider their customers as investors and share the risk and return according to the defined ratio (Saiti et al., 2019). Moreover, money generated from these platforms is only invested in halal, socially acceptable projects or products and is characterised by the absence of interest as per the Islamic guidelines (Saiti et al., 2019). The religious supervisory board is an essential body in this platform that ensures the applicability of Islamic laws (Biancone & Secinaro, 2016). Driven by religious inspirations, a social enterprise can attract investors in the Muslim world and gain success. Therefore, there should be a proper strategy for these Islamic platforms to create a good demand and ensure social equity in Muslim societies (Hoque et al., 2018).

The existing literature on Islamic crowdfunding is mainly from entrepreneurs’ perspectives. Several studies examined the intentions of entrepreneurs and small and medium enterprises (SMEs) to use crowdfunding to fulfil their funding requirements. Balushi et al. (2019) found that Islamic crowdfunding best suits SMEs to collect funding in Oman. Biancone and Secinaro (2016) tested the perceived success of I-ECF in Italy and found different elements that are essential for the success of Islamic crowdfunding. Among them, the first and most important element is the existence of a Sharī‘ah board that would monitor the investment in each phase and make sure that the platform works in compliance with Islamic law. The second element is disclosing the report on the performance of the platforms with foreign investors, and lastly, it is important to have a proper protection policy for stakeholders. This study also suggests investor education as one of the central elements for crowdfunding success and to develop a healthy investment market.

Another study conducted in Malaysia by Abdullah and Oseni (2017) examined the need for a Sharī‘ah-compliant financing platform for halal SME firms and proposed a potential Sharī‘ah-compliant ECF model based on existing modes of financing commonly used in the Islamic financial services industry. The proposed model is claimed to be a unique one that is best
suited for the halal industry and is sustainable. A study conducted by Thaker (2019) proposed Islamic crowdfunding to assist Malaysian SMEs in finding an alternative source of funding. The study examined the behavioural intentions of SMEs to use this model.

As one of the developing Islamic countries, Pakistan is a potential market for I-ECF. Foremost, it is an Islamic country with the majority of Muslims having a preference for halal investment platforms. Secondly, Pakistan is a developing country and therefore has limited options for entrepreneurs to finance projects and investors to invest. Thirdly, the country is blessed with motivated and energetic youth. According to the Higher Education Commission (HEC), Pakistan produces more than 25,000 information technology (IT) graduates every year. While the IT sector is revolutionising Pakistan, the funding problem is an obstacle in the way of developing new technologies and products (Khan, 2016).

The Securities and Exchange Commission of Pakistan (SECP) banned a specific ECF in Pakistan in 2017 and advised the general public to refrain from directly investing in startups in the absence of SECP regulations for crowdfunding companies. Without the necessary legal framework in place, these platforms cannot raise funding in Pakistan (Samar, 2018). Recently, considering the importance of such platforms, SECP has been taking various initiatives to develop the regulatory framework of ECF in Pakistan to facilitate fundraising for startups (SECP, 2019).

Specifically, technology startups have limited sources of financing including debt financing and venture capital financing at the early stages of their development. Banks set strict terms and conditions for startups, and it is difficult for startups to secure adequate financing from venture capital at the initial stages (Masood, 2018). Hence, I-ECF is an alternative way out for securing financing for startups and to boost the economy.

The online I-ECF platform requires social interaction; therefore, it is suitable for young people from the age group of 18 to 40 due to their active engagement in social networking (Baber, 2019). Hence, the focus of this study is to examine the perceptions of university students as potential investors of I-ECF in Pakistan. Though crowdfunding is becoming an increasingly popular alternative financing method, there is a need to create awareness of it among university students through meetings, seminars and other avenues (Al Shobaki et al., 2018). It is also recommended by Kaplanoğlu et al. (2019) to hold training workshops to increase students’ awareness of the concept of crowdfunding.

None of the studies on the subject, according to the authors’ knowledge, is from the investors’ perspective on I-ECF. Moreover, there is another research gap on the determinants of investment in I-ECF. Therefore, the current study helps to bridge these research gaps and aims to contribute to the regulatory framework of I-ECF in Pakistan. It will also help towards the development of future crowdfunding platforms that would meet investors’ needs.

**Project Innovativeness**

Project innovativeness is a unique creative change in the business idea, product or process; or, it may also involve the use of new technology in project development (George & Bock, 2011). According to Ahlers et al. (2015), crowdfunding projects that have a high level of innovativeness would be more attractive and appealing to investors. Despite rigid regulations, investors feel
proud to be involved in an innovative project or product (Carr, 2014; Battisti et al., 2020). Hence, this study proposes the following hypothesis:

H1: Project innovativeness has a positive impact on the inclination of investors to invest in I-ECF.

**Return on Investment**

Return is the financial benefit that investors expect to receive based on the amount of their investment (Tung & Liu, 2019). In Islam, the concept of risk and return go side by side. In the light of the Shari‘ah legal maxims *al-ghurm bi al-ghunm* (liability accompanies gain) and *al-kharāj bi al-daman* (benefit goes with liability), risk cannot be isolated from economic affairs (Agha & Sabirzyanov, 2015).

Achsien and Purnamasari (2016) state that crowdfunding generally aligns with the objectives of Islamic finance. The principles of Islamic finance can be applied within the crowdfunding model to provide investors with the opportunity to get higher potential returns while raising funding for projects that are compliant with Shari‘ah requirements. Similarly, Ahlers (2015) argues that Islamic finance and crowdfunding can potentially provide investment opportunities to investors who take an equity stake in the project and thus gain returns, which ensures a fair distribution between shareholders and entrepreneurs. Biancone and Secinaro (2016) argue that equity crowdfunding is the most empirically relevant for studying entrepreneurial signalling to small investors for whom potential monetary returns are important.

However, other studies consider returns to be an insignificant motivational factor for investors of ECF platforms. Daskalakis and Yue (2017), for instance, argued that while investors invest in peer-to-peer (P2P) lending platforms for the sake of returns, they feel excited instead of craving for returns while investing on ECF platforms. Scheder and Arboll (2014) also supported that internal motives and excitement are more important concerns for the investors of ECF than the financial return.

This study nonetheless perceives returns as a motivational factor for investors to use the I-ECF platform. Hence, the following hypothesis is proposed:

H2: Project returns have a significant influence on the inclination of investors to invest in I-ECF.

**Perceived Risk**

Through I-ECF, investors invest in socially responsible halal projects, where they have a clear understanding of risks (Biancone & Secinaro, 2016). Daskalakis and Yue (2017) studied the factor of risk in ECF investment in the context of Poland, Germany and Spain and found that in Germany, the risk perception regarding fraudulent funding seekers significantly reduces the investor’s intention to invest while there is no such perception in other countries. The study found that platform fraudulence and poor information are the main reasons for risk perception in Spain and Poland.

In Islam, one of the factors that make return legitimate is acceptance of the associated risk. Investment in I-ECF also involves the element of risk for its investors. Risk exists in the form of possible loss of capital, dilution of ownership or late profits from investments. However, the risks due to uncertainty (*gharar*) associated with the existence of the commodity, time of
payment, quality of a commodity, or the quantity of the commodity are forbidden in Islam (Agha & Sabirzyanov, 2015). Therefore, in I-ECF there is a defined ratio of profit sharing for both parties to eliminate the risk of uncertainty. The following hypothesis is thus proposed:

H3: Project risk negatively influences the inclination of investors to invest in I-ECF.

Perceived Informativeness
Perceived informativeness is the ability of a fundraiser to provide necessary information about the business and its plan to the investor (Kim et al., 2010). It is natural that if the investor receives timely information about the business development, the project funder’s group cohesion, group identity, and funding will also increase (Dorfleitner et al., 2018). Such a level of quality information is crucial to influence the intention of the audience to back the product. Samarah and Alkhatib (2019) studied the important factors for ECF and donation-based crowdfunding and found that fundraisers’ focus on financial knowledge is crucial for the success of ECF in developing countries. This study also perceives that if investors are satisfied that sufficient information is provided by the fundraiser, their level of willingness automatically increases. Hence, the following hypothesis is proposed:

H4: Perceived informativeness has a positive impact on the inclination of investors to invest in I-ECF.

Third-Party Seal
This refers to the assurance by a certified third party such as a bank, accountant, customer union, or a computer company for the protection of the funder (Kang et al., 2016). The third party undertakes to provide oversight of the crowdfunding project for a minimal fee (Kang et al., 2016). The presence of a Sharī‘ah board within I-ECF further ensures the application of Islamic laws and mitigates investors’ concerns about Sharī‘ah non-compliance (Bonsón Ponte et al., 2015; Biancone & Secinaro, 2016; Kang et al., 2016). Therefore, this study perceives that the presence of a third party enhances the trust of investors and ultimately increases their intention to invest in these platforms. Based on this argument, the following hypothesis is proposed:

H5: The presence of a third party positively influences the inclination of investors to invest in I-ECF.

Protection Policy
It is defined as the investor’s perception regarding the protection of their personal information on the crowdfunding platform. The privacy policy of the platform has a great impact on the user’s opinion (Capistrano & Chen, 2015; Nemec Zlatolas et al., 2019). If the funder perceives that the protection policy of the platform is perfect, he/she will not have a fear of disclosing their personal or financial information on the platform (Wang et al., 2018). Lin (2017) identified the loopholes in the protection of funders on the current ECF platform in China and suggested that a sustainable ECF market should rest on a comprehensive network of legal and market institutions that ensure investor protection. Hence, it is perceived that full information disclosure from the fundraiser and a proper protection policy by the platform may enhance the willingness of the investor to invest. Based on the above argument, the following hypothesis is proposed:

H6: Protection policy positively influences the inclination of investors to invest in I-ECF.
Attitudes toward Helping Others
Rodriguez-Ricardo et al. (2018) studied the impact of attitude towards helping others on the willingness of people to invest in ECF and found it as a key determinant that affects the participation in ECF through social identification. According to Islam (2017), supporting a social cause is the reason for investors to invest in crowdfunding platforms. Moreover, Islam also gives much importance to the helping attitude. This study perceives that people who invest in I-ECF also have a philanthropic intention to help others. Based on this argument, the following hypothesis is proposed:
H7: Attitudes toward helping others increase the inclination of investors to invest in I-ECF.

Interpersonal Connectivity
Interpersonal connectivity is the social connection or affiliation among people and is one of the motives for people to participate in online groups. Maintaining interpersonal connectivity brings about benefits that participants gain by being part of a group such as social support, friendship and intimacy (Gerber & Hui, 2013). Islam also gives high importance to building close relationships among people. Hervé et al. (2019) support the idea that interpersonal connectivity indirectly influences investors to participate in crowdfunding through social identification. People with high interpersonal connectivity are more communicative and like to engage in social connections such as those between fund seekers and investors, so it may enhance their participation in crowdfunding. Based on this argument, the following hypothesis is proposed:
H8: Interpersonal connectivity moderates the role of a helpful disposition by increasing the inclination of investors to invest in I-ECF.

The theoretical framework of this study is presented in Figure 1.

RESEARCH METHODOLOGY
The study is quantitative in nature with pre- and post-hypothesis testing. Pre-post questionnaires were used, as it is a rapid and convenient method to assess respondents based on the intervention (video showcase). This method provides immediate results of the intervention and a means for timely refinement (Stratton, 2019). Kaplanoğlu et al. (2019) suggested holding training workshops to increase student’s awareness of the concept of crowdfunding. This study uses the video showcase as the intervention method to develop the students’ knowledge on I-ECF from various aspects.

Sample and Sampling Technique
The study used a convenient sampling technique to collect responses from the graduating students of universities from the computer and business studies departments. Students, representing the sample for this study, were selected because the literature supports that universities and crowdfunding go together, as the people mostly heavily involved in crowdfunding investing are 18–35 year-olds equipped with internet. Therefore, it is crucial to understand the awareness of students as potential investors for endorsing I-ECF in developing countries such as Pakistan.
In total, 375 questionnaires were distributed to the graduating students of universities from the computer and business studies departments in the twin cities (Islamabad and Rawalpindi) of Pakistan. Out of these 375, only 350 questionnaires were deemed appropriate for the study. The questionnaire used in the study was based on a five-point Likert scale where 1 was considered as strongly disagree and 5 as strongly agree. Use of the self-administered questionnaire entailed three sessions. In the first session, respondents were given the questionnaire with items on all variables. The second session involved showcasing a video on I-ECF which comprised basic information on all variables of the study. The two-minute video was developed in Powtoon software. Students who are engaged in a hands-on intervention research study gain more practical and valuable skills (Schwartz & Smith, 2015). In the third session, the same questionnaire was again administered to analyse the pre-and post-effects. Table 1 presents the details of the questionnaire items and their source studies.
Table 1: Sources of Questionnaire Items

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform characteristics</td>
<td>5</td>
<td>Zhu &amp; Zhou (2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lin (2017)</td>
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<tr>
<td></td>
<td></td>
<td>Wang et al. (2018)</td>
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<td></td>
<td></td>
<td>Saiti &amp; Musito (2019)</td>
</tr>
<tr>
<td>Project characteristics</td>
<td>10</td>
<td>Zhu &amp; Zhou (2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lin (2017)</td>
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<tr>
<td></td>
<td></td>
<td>Rodriguez-Ricardo et al. (2018)</td>
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<td></td>
<td></td>
<td>Wang et al. (2018)</td>
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<tr>
<td></td>
<td></td>
<td>Saiti &amp; Musito (2019)</td>
</tr>
<tr>
<td>Social traits</td>
<td>6</td>
<td>Zhu &amp; Zhou (2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lin (2017)</td>
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<td></td>
<td></td>
<td>Rodriguez-Ricardo et al. (2018)</td>
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<td></td>
<td></td>
<td>Wang et al. (2018)</td>
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<tr>
<td></td>
<td></td>
<td>Saiti &amp; Musito (2019)</td>
</tr>
<tr>
<td>Personal traits</td>
<td>2</td>
<td>Rodriguez-Ricardo et al. (2018)</td>
</tr>
<tr>
<td>Inclination to participate in crowdfunding</td>
<td>6</td>
<td>Wang et al. (2018)</td>
</tr>
</tbody>
</table>

Source: Authors’ own

RESULTS

The study used Statistical Package for Social Solution (SPSS) software, version 23 to run paired samples t-test and moderated multiple regression. To test the hypotheses, moderated multiple regression analysis using process macro version 3.5 was conducted that gives the results of both regression and moderation. The demographic information of respondents is given in Table 2, which shows that female respondents are 56.6 per cent and the majority of respondents were 20–29 years of age. The table also shows that about 80 per cent of the respondents hold bachelor’s degrees.

Table 2: Demographical Background of Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>152</td>
<td>43.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>198</td>
<td>56.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 20 years</td>
<td>65</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>20–29 years</td>
<td>270</td>
<td>77.2</td>
</tr>
<tr>
<td></td>
<td>&gt; 30 years</td>
<td>15</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Educational status</td>
<td>Bachelor’s</td>
<td>280</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>70</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Authors’ own

Table 3 shows the descriptive statistics, which comprise mean, standard deviation and Cronbach Alpha for reliability. The table shows that Cronbach’s value for project innovativeness is 0.777. This is the same with other variables including risk and perceived informativeness as they also lie between 0.7 and 0.8. If the Cronbach result is between 0.8 and 0.9, it is considered to be a
good measure. The variables including the return, third-party seal, protection policy, helping attitude and interpersonal connectivity lie in the range of the good measure, which is a positive sign. Similarly, if the Cronbach measure is between 0.9 and 1, it is an excellent measure according to Sekaran and Bougie (2016), which applies to the variable inclination of students towards I-ECF. Table 3 also shows the values of means and standard deviation of the variables.

Table 4 contains the values of Pearson’s correlation 1, which indicates the relationship among the variables. The values show positive correlation among all variables. The highest correlation was found between attitude to help others and third-party seal ($r=0.660$).

### Paired Samples T-Test
This study aims to determine the difference between the pre- and post-perceptions of respondents about I-ECF by showing them videos related to all the basic information about I-ECF and to analyse the change in their perceptions to use I-ECF in the future. In this context, Table 5 presents the results of the paired-samples t-test of pre- and post-data. The mean difference or the $t$-value is the change in the mean values of pre- and post-results. The mean value is negative for the majority of variables because SPSS subtracts the result of post-data (higher value) from the pre-data (lower value). The negative mean for all the variables, except return, shows that there was a significant change in the perception of respondents after watching the video. The value of the positive mean for the return variable depicts that there was no significant positive change that occurred in the perceptions of potential investors.

The most important column of paired-samples t-test results is the value of significance (last column in Table 5). If the value of significance is less than 0.05, it shows the positive change in the perceptions of people, and the null hypothesis will be rejected. According to the results shown in Table 5, the value of significance is less than 0.05 for variables including project innovativeness, risk, perceived informativeness, helping attitude, and inclination of students towards I-ECF. Therefore, the null hypothesis was rejected, meaning that there is no significant impact of these variables on the students’ willingness to use I-ECF. The most important variable to discuss, however, is the significant positive change in the willingness of potential investors to use I-ECF in the future. If potential investors want to use I-ECF, there should be a platform for I-ECF in Pakistan. However, the variables including the return, third-party seal and interpersonal connectivity have the value of t-test greater than 0.05, depicting that potential investors’ willingness to use I-ECF is not changed by these factors. So, the null hypothesis is accepted which implies that there is no impact of return, third-party seal and interpersonal connectivity on the willingness of investors to use I-ECF in the future as a suitable investment platform. The smaller values of standard error in Table 5 depict that there is less deviation from the mean, which is a good prediction.

### Regression Analysis
To test the hypotheses, moderated multiple regression analysis using process macro version 3.5 was conducted that gives the results of both regression and moderation. By using model 1 in the Process macro, the test was conducted with all variables. The results in Table 6 show that the $R^2$ value is 0.655, which indicates that 65.5 per cent of the variation in the dependent variable was
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caused by independent variables of the study. Furthermore, the values of the coefficient for independent variables and moderator are shown in the model summary in the table.

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Project innovativeness</td>
<td>3.766</td>
<td>.834</td>
<td>0.777</td>
</tr>
<tr>
<td>2 Return on investment</td>
<td>4.013</td>
<td>.795</td>
<td>0.801</td>
</tr>
<tr>
<td>3 Risk of investment</td>
<td>3.387</td>
<td>.662</td>
<td>0.718</td>
</tr>
<tr>
<td>4 Perceived informativeness</td>
<td>3.682</td>
<td>.705</td>
<td>0.771</td>
</tr>
<tr>
<td>5 Third-party seal</td>
<td>3.671</td>
<td>.864</td>
<td>0.825</td>
</tr>
<tr>
<td>6 Protection policy</td>
<td>3.815</td>
<td>.789</td>
<td>0.866</td>
</tr>
<tr>
<td>7 Attitude to help others</td>
<td>3.940</td>
<td>.753</td>
<td>0.861</td>
</tr>
<tr>
<td>8 Interpersonal connectivity</td>
<td>3.907</td>
<td>.900</td>
<td>0.890</td>
</tr>
<tr>
<td>9 Inclination towards I-ECF</td>
<td>3.709</td>
<td>.770</td>
<td>0.924</td>
</tr>
</tbody>
</table>

Source: Authors’ own

Table 4: Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Project innovativeness</td>
<td>1</td>
<td>.470*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Return on investment</td>
<td></td>
<td>1</td>
<td>.436*</td>
<td>.432*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Risk of investment</td>
<td></td>
<td></td>
<td>1</td>
<td>.513*</td>
<td>.477*</td>
<td>.453*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Perceived informativeness</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.365*</td>
<td>.292*</td>
<td>.360*</td>
<td>.641*</td>
<td></td>
</tr>
<tr>
<td>5 Third-party seal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.500*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Protection policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.443*</td>
<td>.403*</td>
<td>.364*</td>
</tr>
<tr>
<td>7 Attitudes toward helping others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.519*</td>
<td>.560*</td>
</tr>
<tr>
<td>8 Interpersonal connectivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.471*</td>
</tr>
<tr>
<td>9 Inclination towards I-ECF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Authors’ own
Note: ** Correlation is significant at 0.05 level.

Table 5: Paired Samples T-Test

<table>
<thead>
<tr>
<th>Pair</th>
<th>SD</th>
<th>SE Mean</th>
<th>Mean</th>
<th>T</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 IN – INP</td>
<td>- .09026</td>
<td>.70079</td>
<td>-2.406</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td>2 RE – REP</td>
<td>.03343</td>
<td>.03751</td>
<td>.68915</td>
<td>.906</td>
<td>.365</td>
</tr>
<tr>
<td>3 PI – PIP</td>
<td>-.08596</td>
<td>.03689</td>
<td>.77821</td>
<td>-2.064</td>
<td>.040</td>
</tr>
<tr>
<td>4 RI – RIP</td>
<td>-.13639</td>
<td>.04166</td>
<td>.66513</td>
<td>-3.831</td>
<td>.000</td>
</tr>
<tr>
<td>5 IC – ICP</td>
<td>-.07163</td>
<td>.03560</td>
<td>.77257</td>
<td>-1.732</td>
<td>.084</td>
</tr>
</tbody>
</table>

Source: Authors’ own
Note: IN=Project Innovativeness, RE=Return on investment, PI=Perceived Informativeness, RI=Risk of investment, IC=Interpersonal Connectivity. P following a variable name indicates the post result; names without P are pre results.
The results in Table 6 show the following:

- The beta value for project innovativeness is $\beta=0.031$ ($p=0.054$), confirming the significant positive effect on the inclination of the investor to invest in the project. Thus, H1 is accepted.

- Return on investment shows the statistical value of $\beta=-0.081$ ($p=0.044$), confirming a significant negative influence on investors’ inclination to invest in I-ECF. Thus, H2 is accepted.

- Risk of investment showed insignificant effect ($\beta=0.058$ ($p=0.188$) on the investor’s willingness to invest in I-ECF. Thus, H3 is rejected.

- The coefficient value of perceived informativeness is ($\beta=0.117$, $p=0.013$), confirming the significant positive effect on the inclination of the investor to invest in the project. Thus, H4 is accepted.

- Third-party seal did not show a significant effect ($\beta=0.020$, $p=0.723$). Hence, H5 is rejected.

- The statistical values of protection policy ($\beta=0.308$, $p=0.000$) and helping attitude ($\beta=0.353$, $p=0.000$) were also significantly positive, thus supporting the hypotheses of H6 and H7.

- The interaction term of Attitude*Connectivity confirmed the positive moderation of interpersonal connectivity ($\beta=0.113$, $p=0.020$) between the relationship of interpersonal connectivity investor’s willingness to invest in I-ECF. Hence, H8 is also accepted.

The moderation effect is shown in Figure 2.
DISCUSSION
The purpose of this study is to determine the inclination of potential investors towards I-ECF as the future platform of Islamic investments in Pakistan. This section discusses the pre- and post-hypothesis testing with intervention results to answer the research questions of the study, notably, to explore the factors that influence potential investors (university students) to invest in I-ECF platforms and to use I-ECF in the future.

Several studies support the viewpoint that projects that are unique and innovative get financing through crowdfunding platforms (Carr, 2014; Scheder & Arboll, 2014; Bretschneider & Leimeister, 2017; Battisti et al., 2020). Similarly, the findings of this study support the fact that project innovativeness appeals to investors to finance the project. Although return on investment is considered the primary reason for people to invest in different forms of investment avenues, the results of this study show the negative effect of return on willingness to invest in I-ECF. This shows that investors do not invest through I-ECF platforms primarily for the monetary return. This finding is supported by the results of Scheder and Arboll (2014) and Daskalakis and Yue (2017), who assert that, although investors invest for the monetary return in P2P lending, excitement and interest are the main motivational factors for people to invest in ECF. Thus, the hypothesis for return in this study (H2) has been accepted as it is confirmed from the results that investors still invest in projects uploaded on I-ECF platforms even if the project yields negative returns.

Risk also holds an important place in I-ECF as, in an Islamic platform of investment, return should be commensurate to the risk level. Therefore, this study examined the involvement
of risk in the willingness of investors to use I-ECF in the future and found that risk is not an important factor for the investors when they envisage investing in I-ECF. This finding is in contradiction with the results of Daskalakis and Yue (2017), who found that fraudulence is the main risk that investors face in Spain and Poland.

Additionally, this study finds that availability of information about the project is an important concern for investors when considering I-ECF platforms. Investors prefer those projects about which information is clearly and fully disclosed. This result is supported by the study of Dorfleitner et al. (2018) who found that if the project owner updates the fund providers frequently about business development, it enhances group cohesion, group identity and the willingness of more fund providers to invest in that project. Studies by Ahlers et al. (2015) and Tung and Liu (2019) also revealed similar results—that clear and elaborative information encourages investors to choose a project. Moreover, if proper information regarding the project risk is given within the description of the project, it increases the funders’ trust level and ultimately attracts financing.

Among platform-related factors, this study finds that potential investors do not consider the third-party seal as one of the important elements for investments in I-ECF platforms. This finding therefore does not align with previous studies which support the role of third-party seals as a means to help investors in validating project information and ensuring the enforcement of explicit rules (Bonsón Ponte et al., 2015; Kang et al., 2016). There may be different reasons for this contradictory result. One reason could be that investors consider the Sharīʿah board as the only suitable third party for validating projects on I-ECF platforms. However, the presence of other third parties in the form of a bank or the technology firm is equally important to maintain the project transactions whereas, the responsibility of the Sharīʿah board in the I-ECF platform is limited to ensuring the applicability of Islamic rules with regard to fair transactions and use of funds in ethical businesses. Thus, investors might not have understood the concept of third-party seals in I-ECF.

This study finds that the protection policy of the I-ECF platform is considered an important factor for the security of the information shared by potential investors. This information can relate to personal identification or financial information of investors. If assurance is provided for the protection of the information shared by the investors on I-ECF platforms, they would feel safer and more secure to invest. Capistrano and Chen (2015) and Wang et al. (2018) found similar results—that if the information is secured on the platform, the investor will not fear to disclose their information and it will enhance their willingness to invest in I-ECF. Investors feel that their names, email addresses and bank information represent sensitive information that need to be properly encrypted and secured to be used on the I-ECF platform. Investors may also think that there is a need for regulation of I-ECF by the government to assure that these platforms are secure. Hence, hypothesis (H6) that states that the protection policy of the I-ECF platform positively affects the investor’s willingness to invest in I-ECF is accepted in this study.

Furthermore, in I-ECF platforms, people help those who are in dire need of funding to start their unique ideas. Especially in underdeveloped countries, startups have limited financing options to avail of. Therefore, there is a need for such platforms to help startups. It has been analysed through this study that people who are kind-hearted and are always willing to help
others are ready to use such platforms. Their helping attitude is one of the factors that will influence them to use I-ECF in the future. These findings are supported by the findings of Gerber and Hui (2013) that people feel connected and associated with the crowdfunding community. These findings are also consistent with the warm-glow theory that people have the natural desire to help others and that it gives them a feeling of satisfaction and happiness. This desire motivates them to use such platforms and institutions where they have the opportunity to help others. Hence, the hypothesis (H7) that attitude towards helping others increases the investor’s intention to participate in I-ECF is accepted in this study.

Finally, this study finds that interpersonal connectivity moderates the role of the helping attitude by increasing the investor’s intention to participate in I-ECF. In the case of people who are willing to help others and stay in touch with others, interpersonal connectivity will boost their inclination towards the usage of I-ECF in the future. These findings are supported by Gerber and Hui (2013) and Hervé et al. (2019), who confirmed that interpersonal connectivity influences the investors’ inclination to participate in ECF through social traits and that people with high social interactions are found to be more inclined to use I-ECF.

CONCLUSION
I-ECF is a platform of Islamic investments where the return is legitimate and the funding is invested in ethical businesses. It addresses the financing challenge faced by entrepreneurs in kickstarting their startups. This problem is more common in developing countries where there are limited options for startups to seek financing. Therefore, the availability of such a platform in developing countries such as Pakistan is deemed essential.

This study considers university students as potential users of I-ECF in Pakistan; hence, it is important to gauge their viewpoint on I-ECF and their willingness to use I-ECF in the future. This research studied the impact of project-related, platform-related and personal traits on the willingness of potential investors to use I-ECF and concludes that the inclination of potential investors is increased after knowing about I-ECF and its working. The motivational factors of the studied sample include project innovativeness, risk, perceived informativeness, protection policy and attitude towards helping others, along with interpersonal connectivity.

Recommendations
It is recommended to the regulators of Islamic countries to promote I-ECF platforms to provide financing avenues to unique, low-return yet Shari`ah-compliant small startups. It is recommended that regulatory bodies consider the significant motivational factors identified in this study when regulating I-ECF platforms. It is also recommended to potential I-ECF platforms to consider these motivations of potential investors so that necessary actions can be taken to enhance their productivity. Some other specific recommendations are as follows;

1. Startups using I-ECF platforms should highlight the innovative features of their projects, as potential investors consider project innovativeness along with Islamic values as important factors while investing in projects in I-ECF platforms.
2. Low-return startup projects should consider the use of I-ECF platforms to get funding.
3. I-ECF platforms should disclose full information about the projects to gain investors’ trust and their financing.
4. As far as platform-related factors are concerned, there is a need to endorse a protection policy to encourage investors to use I-ECF platforms.
5. The strong desire for interpersonal connectivity among Muslim investors, coupled with their helping attitude, is expected to drive an increase in the adoption of I-ECF platforms. This, in turn, will contribute to the upliftment of marginalised segments within Muslim societies by attracting investor motivation to utilise I-ECF platforms for investment purposes.

**Implications of the Study**

I-ECF platforms can be a suitable avenue to provide financing to startups that may generate employment opportunities in the economy. Therefore, regulators and policymakers should conduct continuous awareness campaigns on crowdfunding via social media platforms to discuss the benefits of crowdfunding at various levels of society. Regulatory bodies such as the SECP should consider the platform-related factors (e.g., protection policy) when developing regulations on I-ECF in Pakistan. The SECP should also consider the findings of this study pertaining to the motivational factors that influence students to invest in I-ECF. Crowdfunding as an alternative method of financing may gain popularity by leveraging on brand ambassadors to create the necessary connection with investors. Universities could partner with ECF platforms such as StartEngine to develop intra-university crowdfunding platforms.

I-ECF platforms aim at fulfilling the objectives of Sharīʿah by serving those segments of Muslim societies (e.g., SMEs) who are unable to get financing from traditional Islamic financial institutions. Therefore, through I-ECF platforms, the startups with core values of Islamic finance may get access to investors who have a helping behaviour and wish to contribute towards socio-economic development. If startups (university incubators) can raise financing from students via I-ECF platforms, it will help develop a sustainable model that can contribute to the country’s long-term development by fostering a knowledge economy as a source of wealth.

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