Predictors of Money Management Behaviour Among University Students

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Purpose – Management of money, a global problem, is a capability essential for students enrolled in universities as they are considered responsible for organisations and the nation in the future. The literature lacks pieces of evidence from developing nations and factors other than financial literacy, as previous studies have been done in developed nations. This study aims to fill this research gap and investigate influencing factors, other than financial literacy and understanding the level of influence of those factors.

Design/methodology/approach - This study has been conducted in Pakistan with the help of the quantitative survey method using a self-administered questionnaire among university students in Pakistan.

Findings – The findings indicate that all the factors used as independent variables have a positive and statistically significant effect on the money management behaviour of university students in Pakistan. This study also shows that there is a deviation in the behaviour of the students concerning their institutes, academic year, type of degree, residence, income, and working hours.

Research limitations/implications - Due to Covid-19 data was gathered online using a convenient, non-random sampling technique instead of a random sampling technique. Moreover, implications and future research directions are provided.

Originality/value – This study contributes to the literature of developing nation perspective and studies’ predictors beyond financial literacy, debt management, and financial well-being. This study adopted a quantitative approach as much of the previous work has been done through a qualitative approach.

Key words: Pakistan, Money management behaviour, Financial behaviour, Access to finance, Quantitative techniques.
1. Introduction

Since money is a scarce resource, dealing with it has been witnessed as a global problem. Even the wealthiest nation i.e. the USA suffers from such issues related to money management (Widener, 2017). The capability to manage it is required by each individual of the society as it defines life’s quality and also impacts living standards (Tunrayo et al., 2020).

Management of money is defined as an ability to deal with money effectively to abstain from issues related to money. Drowned by their unlimited desires, inappropriate management of money has been witnessed as a major problem being faced by many students, hence making it a researchable area for many scholars over the years (Sundarases and Rahman, 2017b, Bamforth et al., 2018, Sachitra et al., 2019). Many of the previous researchers have claimed university enrolled students as future managers, revenue generators not only for the organisations but for the nation too. So, the behaviour students develop regarding the management of their money at universities is most likely to be carried forward in their careers (Xiao et al., 2007). This makes the understanding of students’ financial behaviour important for several bodies including their parents, organisations, financial and educational institutions, and also the government (Solis and Durband, 2015).

Much of the previous work in this area has been done in the context of undergraduates in developed nations whereas limited evidence is present from developing nations (Sachitra and Wijesinghe, 2018, Zulfaris et al., 2020). Most of the previous researchers emphasised financial knowledge (Baharuddin et al., 2016, Bapat, 2019), parental socialisation (Zhao and Zhang, 2020, Zulfaris et al., 2020), and peer influence (Bursztyn et al., 2012) as the predictors of money management behaviour among the students. Few researchers have worked on factors i.e. economic, social, and psychological as predictors of money management behaviour among undergraduates (Bamforth et al., 2017, Sachitra et al., 2019). From a financial perspective, it has been witnessed that students get themselves engaged with financial institutions once they move to work, open a current account, and make use of credit/debit cards for managing their money (Hutton and Seavers, 2001). This makes it important for researchers to study the influence of financial access on the money management behaviour of the students.

The current study aims to fulfill the objectives mentioned below:

- To investigate economic factors as a predictor of money management behaviour among university students in Pakistan.
- To investigate social factors as a predictor of money management behaviour among university students in Pakistan.
- To investigate psychological factors as a predictor of money management behaviour among university students in Pakistan.
- To investigate access to finance as a predictor of money management behaviour among university students in Pakistan.
With the help of the objectives mentioned above, this study aims to answers the research question, “What are the predictors of money management behaviour among university students in Pakistan?”

2. Literature Review

This section of the paper focuses on the behaviour of university students regarding the management of money and how different factors i.e. economic, social, psychological, and access to finance influence their behaviour.

2.1 Money Management Behaviour

Many of the previous researchers have studied money and the connection of people with money (Yamauchi and Templer, 1982, Tang, 1995, Tang et al., 2006). Ridhayani and Johan (2020) declared money as a powerful motivator of the behaviour of an individual. Van Raaij (2016a), in his book, considered money management as a domain of financial behaviour. This includes the way people deal with money to meet their end needs. As being among the components of financial management behaviour, the money management behaviour of students has been investigated by a few researchers (Bamforth et al., 2018, Sachitra and Wijesinghe, 2018, Sachitra et al., 2019, Baharuddin et al., 2016, Zulfaris et al., 2020). It has been witnessed that an effective behaviour of money management works as a shield against excessive spending and personal debt i.e. saving, spending, budgeting, and investing (Godwin and Koonce, 1992).

To be successful in life, the ability of an individual to manage his money plays an important role, and adopting effective financial management strategies is not only important for adults but also young people including university students. An effective management behaviour of an individual not only plays a role in mental fitness, and also social relationships, but also helps one in enhancing his/her quality of life (Sachitra and Bandara, 2017). They need to manage their money properly as they have to face difficulty in covering their high monthly expenses including their tuition fee, hostel fee, transportation, and some other consumption (Aung and Mon, 2020).

2.2 Economic factors as a predictor of money management behaviour

It was claimed by Cull and Whitton (2011) that economic factors influence an individual’s financial behaviour. These factors include micro and macro-economic factors. It has been witnessed that many students go for student loans due to an increase in their tuition fees, disturbing their lifestyle and financial well-being (Hillman, 2015). Many researchers have studies which claim that financial literacy is one of the economic factors and that better financial literacy leads to better financial behaviour, money management, better planning of their debt, and retirement (Aydin and Akben Selcuk, 2019, Setiawan et al., 2020). Previous
studies have proven the links of financial literacy and financial behaviours i.e. money management, debt, and saving behaviours have been proved (Van Rooij et al., 2011). In this study, the theory of financial literacy has been used to examine the influence of economic factors, which includes financial literacy on the behaviour related to money management of university students. In light of the evidence provided by previous researchers, it is witnessed that there is a direct relationship between economic factors and the money management behaviour of the students (Bamforth et al., 2017, Sachitra and Wijesinghe, 2018, Bamforth et al., 2018, Sachitra et al., 2019). So the first hypothesis of this study states:

H1: Economic factors are one of the predictors of money management behaviour

2.3 Social factors as a predictor of money management behaviour

Social factors are important for one to identify his/her money-related management and setting a benchmark for the management of his money (Gudmonson and Danes, 2011). There are several kinds of research conducted in past showing the influence of social factors, social norms on the financial behaviour of an individual (Bamforth and Geursen, 2017, Bamforth et al., 2018, Sachitra and Wijesinghe, 2018, Sachitra et al., 2019).

During the phase of childhood, a significant and positive impact of financial socialisation has been seen in students’ financial behaviour. Pieces of evidence suggest young people learn attitudes and behaviours that they observe from their surroundings. Camphenhout (2015) believed that financial behaviour is influenced by many social agents which include our parents, teachers, peers, media, and religion. Shim et al. (2015) indicated that according to social learning theory, learning from observations of individuals impacts an individual’s financial behaviours. Pieces of evidence suggest young people learn attitudes and behaviours that they observe from their surroundings. Camphenhout (2015) believed that financial behaviour is influenced by many social agents which include our parents, teachers, peers, media, and religion.

Among all the socialisation agents, parents play a vital role and positive mechanism in influencing financial decisions and instructing the right attitude and behaviour to their children (Gudmonson and Danes, 2011, Pathirana, 2016). Previous researches have documented that parents are an effective source of communicating money-related education among their children (Rosa et al., 2017, Tang, 2017, Zulfaris et al., 2020, Jamal et al., 2015, Zhao and Zhang, 2020) and have been considered as one of the elite socialisation agents not just for the youth but also for the adults (Sundarasen and Rahman, 2017b). Sachitra and Wijesinghe (2018) researched in Srilanka to determine factors influencing money management behaviour among the undergraduates and included religious beliefs as a dimension of social factors basing Srilanka as a religious and cultural-based country. Concerning money management and religious beliefs, there is not so much literature present to date. So the second hypothesis of this study states:
H2: Social factors are one of the predictors of money management behaviour

2.4 Psychological factors as a predictor of money management behaviour

Pieces of the literature suggest that psychological factors also play an important role in predicting money management behaviour (Zhang and Kemp, 2009). Psychology of humans focuses on how people use their thinking to get themselves engaged and deal with the world and how it affects their money management process, as well as their financial decision-making (Bamforth et al., 2018). The happiness, delight, and well-being of students are indicated by the financial satisfaction which they gain through their behaviour related to the management of money (Solis and Durband, 2015). Several factors are present which play their role in influencing money management; this includes self-control, self-regulation, money illusion, self-concept/self-identity, emotions, and personality (van Raaij, 2016b, Bamforth et al., 2017).

Self-concept or self-identity can be referred to as how people define themselves and the reflection of that can be seen in their behaviour (Dogan and Yaprak, 2017). It can also be reflected by how an individual manages his/her money (Prince, 1993) as money helps an individual to define his/her lifestyle. Self-concept plays its part in influencing behavioural decisions and acts as a diviner of intention and behaviour as claimed by McNair et al. (2016) in light of the theory of planned behaviour.

Personality is defined as the pattern of thinking, emotions, and behaviours that individuals adopt in response to a certain situation (Bamforth et al., 2017). Youth finds the use of financial products more attractive which leads to overspending (Atkinson and Kempson, 2004). Furthermore, they find it difficult to minimise their stress and try to adopt non-appropriate strategies to mitigate it which increases their borrowings (McNair et al., 2016). Individuals who suffer from a lack of confidence in their ability to turn down attractiveness mainly make short-term and abrupt decision-making related to their money (Peltier et al., 2013). These students tend to make risky decisions and use credit cards intensively which disturbs their debt management (Bamforth et al., 2017).

It has been witnessed that the effect of emotion on financial behaviour differs concerning its type. Positive emotions help one in making sound and effective financial decisions and encourage one to make less risky decisions and stop abrupt planning and decision-making (Xiao et al., 2007, Xiao et al., 2008, Letkiewicz and Fox, 2014), whereas, negative emotions lead to ineffective decision-making and planning, resulting in anxiety, stress, being out of control, frustration, and an unstable financial state (Mitchell and Mickel, 1999). It has been investigated that students experience more negative feelings than adults which include stress, anxiety, neuroses, and unstable states which make students adopt a tense view of money management affecting the way of its usage. HanNa et al. (2015) figured out that students who remained in a state of stress about not getting what they want and not being able to save for
emergencies were unable to make their payments, save, and also were unable to experience positive emotions. They usually felt less confident and mostly get themselves to indulge in negative financial practices. The third hypothesis of this study states:

H3: Psychological factors are one of the predictors of money management behaviour

2.5 Access to finance as a predictor of money management behaviour

In recent times, from the side of students to access their funds, immense participation in using technologies has been seen. These technologies include phone banking or mobile banking, the use of ATMs, debit cards, and credit cards. Churaman (1985) claimed that college students indulge in using numerous features of electronic banking which includes ATMs and debit cards. On asking about their money management they claimed that they were controlling their money in a better way but using financial services makes you over-spend more than a saver (Agarwal et al., 2019, Cobla and Osei-Assibey, 2018).

On asking those students holding credit cards, they stated that it is easier and convenient to pay with a card rather than cash (Gan et al., 2016). It has also been witnessed that the development of mobile payments has also made it easier and convenient for users to deal with daily transactions (Mouakket, 2020). Contrary to this, Zainudin et al. (2019) state that this easiness and convenience makes people to become over-spenders leading to higher overdue balances; hence, this disturbs their management of money.

Knight (2003) indicated that young students are mostly low-income people and so opening a basic bank account is most appropriate for them without overdraft facilities as previous researches have concluded that usage of credit cards and borrowing loans harm an individual's money management behaviour (Wang and Xiao, 2009, Leclerc, 2012, Bamforth et al., 2017). There is a dearth of literature regarding money management and access to finance; hence research in this area is needed. The fourth hypothesis of this study states:

H4: Access to finance is one of the predictors of money management behaviour.

3. Methodology

The purpose of this study is to investigate factors i.e. economics, social, psychological, and access to finance as the predictors of money management behaviour among the university students in Pakistan. Keeping in mind this purpose, this study is underpinned by the positivist research philosophy and uses the qualitative method as a methodological choice. For the collection of data from a large sample size, the survey method is most appropriate which is cost-effective and less time-consuming (Sekaran and Bougie, 2013).
A self-administered questionnaire was designed after adapting questions of money management behaviour, economic factors, social factors, and psychological factors from the study of Sachitra and Wijesinghe (2018). Items for the variable access to finance were adapted from the proposed items by Kumar (2005). The finalised questionnaire was distributed among 30 participants for pilot testing. As no major change was required in the questionnaire, the same questionnaire was distributed online among the students of 10 different universities in Pakistan, due to the presence of Covid-19 convenient sampling technique was used. Out of 425 responses, 405 responses were considered valid and were used for data analysis.

Cronbach alpha was used to measure the internal consistency reliability of the multiple-item scale used for data collection. The more the value of Cronbach alpha, the more the reliability of the scale, and the thumb of the rule says that the Cronbach alpha should be greater than 0.7 (Cortina, 1993).

<table>
<thead>
<tr>
<th>Table 1 Internal Consistency Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach Alpha</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>MMB</td>
</tr>
<tr>
<td>EF</td>
</tr>
<tr>
<td>SF</td>
</tr>
<tr>
<td>PF</td>
</tr>
<tr>
<td>AF</td>
</tr>
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<td></td>
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</tbody>
</table>

As from table 1, it can be seen that all the variables have the value of Cronbach alpha greater than 0.7. On one hand, where access to finance has the highest value of Cronbach alpha i.e. 0.820, psychological factors have the lowest value of 0.714. Whereas, overall reliability statistics of the used instrument was 0.866.

Among 405 respondents, 206 were male while 199 were female representing 50.8% and 49.2% of the total sample size. 194 of the responses came from private universities and 211 from public universities. 65.9% of the responses were collected from students enrolled in their bachelor's degrees while 34.1% from students of MS/M.Phil. Among these students, 205 were doing business degrees while 200 non-business. Responses from students in different academic years were collected. 27 students of year 1, 67 of year 2, 70 of year 3, 89 of year 4, 69 of year 5, and 83 students were from year 6. 299 students were living in their homes while 106 were in hostels. A major portion of the respondents was dependent on their parents as a source of income, while 114 students were dependent on the income they were earning by themselves and only 42 students were getting their income as pocket money as well as their self-income.
Students were having variant incomes and so they were distributed in 7 different groups which can be seen in table 2.

### Table 2 Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>206</td>
<td>50.8</td>
</tr>
<tr>
<td>Female</td>
<td>199</td>
<td>49.2</td>
</tr>
<tr>
<td><strong>Institute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>194</td>
<td>47.9</td>
</tr>
<tr>
<td>Public</td>
<td>211</td>
<td>52.1</td>
</tr>
<tr>
<td><strong>Degree Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>267</td>
<td>65.9</td>
</tr>
<tr>
<td>Master/M.Phil.</td>
<td>138</td>
<td>34.1</td>
</tr>
<tr>
<td><strong>Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>205</td>
<td>50.6</td>
</tr>
<tr>
<td>Non-Business</td>
<td>200</td>
<td>49.4</td>
</tr>
<tr>
<td><strong>Academic Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>27</td>
<td>6.7</td>
</tr>
<tr>
<td>Year 2</td>
<td>67</td>
<td>16.5</td>
</tr>
<tr>
<td>Year 3</td>
<td>70</td>
<td>17.2</td>
</tr>
<tr>
<td>Year 4</td>
<td>89</td>
<td>22.0</td>
</tr>
<tr>
<td>Year 5</td>
<td>69</td>
<td>17.0</td>
</tr>
<tr>
<td>Year 6</td>
<td>83</td>
<td>20.5</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>299</td>
<td>73.8</td>
</tr>
<tr>
<td>Hostel</td>
<td>106</td>
<td>26.2</td>
</tr>
<tr>
<td><strong>Source of Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pocket Money</td>
<td>249</td>
<td>61.5</td>
</tr>
<tr>
<td>Self-Income</td>
<td>114</td>
<td>28.2</td>
</tr>
<tr>
<td>Both</td>
<td>42</td>
<td>10.3</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5000</td>
<td>117</td>
<td>28.9</td>
</tr>
<tr>
<td>5001-10000</td>
<td>106</td>
<td>26.2</td>
</tr>
<tr>
<td>10001-20000</td>
<td>85</td>
<td>20.9</td>
</tr>
</tbody>
</table>
4. Findings

The independent T-Test was used to find the difference between two independent sample means and One-Way ANOVA was used to compare means of more than two populations; we go one-way ANOVA which is another parametric test. An independent T-Test was used for demographic variables like Gender, Institute, Degree Level, Type of Degree, Residence. On the other hand, One-Way ANOVA was used on demographic variables like Academic Year, Source of Income, and Income. Table 3 indicates the results obtained from the tests performed.

Table 3: Difference in Groups

<table>
<thead>
<tr>
<th>Construct</th>
<th>p-value&lt;sup&gt;a&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;b&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;c&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;d&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;e&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;f&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;g&lt;/sup&gt;</th>
<th>p-value&lt;sup&gt;h&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMB</td>
<td>.474</td>
<td>.000</td>
<td>.000</td>
<td>.002</td>
<td>.010</td>
<td>.001</td>
<td>.160</td>
<td>.000</td>
</tr>
</tbody>
</table>

<sup>a</sup> difference among male and female, <sup>b</sup> difference among private and public institutes, <sup>c</sup> difference among bachelor and MS/M.Phil. students, <sup>d</sup> difference among business and non-business students, <sup>e</sup> difference among the place of residences, <sup>f</sup> difference between students of different academic years, <sup>g</sup> difference between sources of income, <sup>h</sup> difference between different incomes.

Table 3 states that there was no difference found in money management behaviour of males and females and students getting income either from parents, self-income, or both. Hence differences in means of the rest of the demographic variables were found. Money management behaviour among the students from public institutes was higher (M=29.75, SD= 4.96) than students from private universities. MS/M.Phil. students showed higher behaviour (M= 30.24, SD= 5.52) than bachelor students. Similarly, higher money management behaviour was found among the students pursuing a business degree (M= 29.62, SD= 5.24) and those who were living in hostels were having higher money management behaviour (M= 29.95, SD= 5.11). From applying One-Way ANOVA, it was discovered that as the students proceed in their academic year, scores of their money management improved. It was also disclosed that different levels of income caused changes in the money management behaviour of the students.

With the help of Pearson correlation, the correlations among the variables of the study were
calculated. All the variables had a positive correlation with money management behaviour, whereas, the correlation between economic factors and money management behaviour was highest i.e. $r = 0.649$, p-value < 0.05, while access to finance showed the least correlation with money management behaviour i.e. $0.311$, p-value < 0.05. Table 4 indicates the correlation between all the variables.

**Table 4 Correlation Analysis**

<table>
<thead>
<tr>
<th></th>
<th>MMB</th>
<th>AF</th>
<th>EF</th>
<th>SF</th>
<th>PF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF</td>
<td>.311**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EF</td>
<td>.649**</td>
<td>.370**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF</td>
<td>.569**</td>
<td>.130**</td>
<td>.488**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>.321**</td>
<td>.051</td>
<td>.242**</td>
<td>.128**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at level 0.01 (2-tailed).**

Multiple regression analysis was conducted to measure the dependency of the dependent variable i.e. money management behaviour on all the independent variables. The results of the analysis are shown in table 5.

**Table 5 Multiple regression results for MMB**

<table>
<thead>
<tr>
<th></th>
<th>MMB</th>
<th>VIF</th>
<th>B</th>
<th>Sig.</th>
<th>95% CI for B</th>
<th>SE B</th>
<th>β</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.542</td>
<td>.538</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EF</td>
<td>1.569</td>
<td>.376</td>
<td>.000</td>
<td>.298</td>
<td>.454</td>
<td>.040</td>
<td>.402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF</td>
<td>1.318</td>
<td>.318</td>
<td>.000</td>
<td>.246</td>
<td>.390</td>
<td>.037</td>
<td>.336</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>1.064</td>
<td>.218</td>
<td>.000</td>
<td>.132</td>
<td>.303</td>
<td>.043</td>
<td>.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF</td>
<td>1.165</td>
<td>.076</td>
<td>.000</td>
<td>.026</td>
<td>.126</td>
<td>.025</td>
<td>.110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Model= "Enter" method in SPSS statistics; B= unstandardised regression coefficient; CI= confidence interval; LL = lower limit;UL= upper limit; SE B= standard error of the coefficient; b= standardised coefficient; R= coefficient of determination.

From table 5 it can be seen that the values of variables’ variance inflation factor (VIF) lie between 1 and 2 and not exceeding 10 showing an absence of multicollinearity. The regression model of the current study statistically significantly predicted MMB, $F (4,400) = 118.440$, $p < .001$, adj. $R^2 = .538$. All four variables (EF, SF, PF, AF) contributed statistically significantly to the predictions, $p < 0.05$. The highest effect among the independent variables was of economic factors on money management behaviour ($\beta = .376$), followed by social factors ($\beta = .318$), then psychological factors ($\beta = .218$). Whereas, the least effect was found of access to finance on money management behaviour.
5. Discussion

5.1 Economic factors as a predictor of money management behaviour

The first hypothesis of this study was to find if economic factors affect money management behaviour. Individual’s income, spending patterns, saving, and investments are affected by the economic factors; this has been proved in previous pieces of researches (Sachitra and Wijesinghe, 2018, Sachitra et al., 2019, Bamforth et al., 2018, Mottola, 2014, Ameliawati and Setiyani, 2018). Our findings are congruent with previous researches and show that economic factors affect the money management behaviour of the university students of Pakistan. Many previous studies have declared financial literacy as an economic factor (Norvilitis et al., 2006) and showed a positive correlation between financial literacy and the management of money. Our study conforms with these studies and opposes the results of Carsky et al. (1984) and Knight and Knight (2000) that there is no correlation between the two and documented that there is no influence of financial education on money management.

An important finding from our data indicates that the majority of the respondents were dependent on the income they got from their parents (pocket money). Whereas respondents in the study of Sachitra et al. (2019) were dependent on the scholarships they got from the government for their education. As, unlike Sri Lanka, tertiary education in Pakistan is not free so students have to go for jobs/freelancing to managing their expenses but, inclined with other studies, the ratio of such students is low in our study. Another finding revealed that most of the respondents showed a high interest in making investments (M= 3.83) while previous studies showed that a small percentage of students were engaged in stock/long-term investments (Sachitra et al., 2019, Bamforth et al., 2018).

Our findings are the same as previous studies in the sense that our respondents search for cheaper ways that help them in managing their money which leads to saving. Bamforth et al. (2018) claimed that the use of technology by students for monitoring their income or cutting their costs helps them in managing their income. Students of Pakistan are capable of making short term decisions over long term financial planning. All in all, students claimed that were aware of how to live within the income they receive.

Results of our study indicate that among all the independent variables, economic factors have the highest correlation with money management behaviour i.e. .649 and according to the multiple regression analysis, comparing with other factors, economic factors recorded the highest beta (β=.376). This result is similar to other researches as several previous pieces of research have indicated that the influence of financial literacy is more compared to other factors like parental and peer influence which is social influence. Sundarasen et al. (2016) and Sundarasen and Rahman (2017a) researched factors influencing the money management behaviour of students. Among the factors (financial literacy, parental norms, and peer
influence) the most influential was financial literacy which is an economic factor as explained by previous researchers.

5.2 Social factors as a predictor of money management behaviour

The second hypothesis of this study was to find if social factors affect money management behaviour. Social factors consist of parental influence as well as peer influence, and also religious beliefs. There are several studies conducted in the past showing the influence of social factors, social norms on the financial behaviour of an individual (Sachitra and Wijesinghe, 2018, Sachitra et al., 2019, Bamforth et al., 2018, Bamforth et al., 2017, Leclerc, 2012, Peltier et al., 2016, Norvilitis and MacLean, 2010). Our study is similar to those researches and shows a positive and significant influence of social factors on money management behaviour ($\beta=.318$).

Our findings have revealed that among the parental influence, peer influence, and religious belief, the most influential is parental influence ($M=3.84$). This result does not incline with the previous research conducted by Sachitra and Wijesinghe (2018) which stated that religious beliefs are more influential on money management behaviour of students than the parental or peer influence. Even though Pakistan is also a religious country like Sri Lanka, but students claimed that they are more influenced by their parents rather than the religious beliefs they follow. Previous researches have also agreed on the influence of religious upbringing on money management behaviour (Alderman et al., 2017, Du et al., 2016) and our study also states that religious beliefs influence the management of money.

According to the regression analysis in our study, results of the Pearson correlation states that social factors have the second-highest correlation with money management behaviour i.e. .569 and so the second-highest impact ($\beta= .318$). There are several studies our study is not in agreement with. Sachitra and Wijesinghe (2018) stated that even though social factors have a higher influence than economic factors, they have less influence than psychological factors. Our study states that social factors have less influence than economic factors but a higher influence than psychological factors and access to finance.

5.3 Psychological factors as a predictor of money management behaviour

The third hypothesis was to find if psychological factors affect money management behaviour. As in agreement with previous researches (Fedorikhin and Patrick, 2010, Robb et al., 2009, Sachitra et al., 2019), our study has determined a positive influence of psychological factors on money management behaviour ($\beta=.218$).

The findings of our study state that a key influential factor for our respondents is their confidence in their ability to manage their money themselves, maintaining their self-identity ($M=3.96$) and so least students wanted to change their ways of spending. This result is not
similar to the result of Bamforth et al. (2018), who stated in his study that the key influential factor for the respondents of his study was stress. Dwyer et al. (2011) and McNair et al. (2016) stated that daily emotional stress is also a factor that influences the money management behaviour of the undergraduates. Sachitra and Wijesinghe (2018) stated students were reluctant to learn from their previous mistakes related to money management but our study shows that majority of the students accepted that they learn from their previous mistakes (M=3.85). The respondents of our study were well aware of the advantages of savings and so the majority believed that one should always save some money.

From the analysis of regression, psychological factors have the third-highest correlation (.321) with money management behaviour and so the third-highest impact (β=.218). Among the 3 factors as used together in previous researches, excluding access to finance, the lowest impact is of psychological factors on money management behaviour, while Sachitra and Wijesinghe (2018) revealed that psychological factors have the highest influence on money management behaviour among undergraduates. But this result of our study is in agreement with the study of Susilowati and Latifah (2017), which states that self-confidence is less influential than financial literacy.

5.4 Access to Finance as a predictor of money management behaviour

There is little research done previously on access to finance concerning money management behaviour. The fourth hypothesis of this study was to find if access to finance influences the money management behaviour of university students. Our study reveals that there is a positive and statistically significant effect of access to finance on money management behaviour; this result is similar to the study of Xiao et al. (2010) and Joseph et al. (2017), who stated that among the factors influencing financial behaviour, financial products and services are also among them. Susswein (1995) in his study indicated that financial products harm the financial behaviour of the students but our study shows a positive relationship; this difference may be due to the excessive use of the credit card facility in western culture.

Results of our study indicate that access to finance has the lowest correlation with money management behaviour of the students (.311) and the lowest impact on it (β=.076, which is about only 7.6%). Several studies are indicating that many students get themselves indulged in loans due to many factors harming their financial behaviour (Wang and Xiao, 2009, Leclerc, 2012, Bamforth et al., 2017). Our study has revealed that there are only a few students who had taken any loan previously (M=2.31) and so only a few have access to credit cards. Cobla and Osei-Assibey (2018) and Agarwal et al. (2019) discouraged the use of financial products and services as they lead to overspending rather than saving. Respondents of our study claimed that having a bank account helps them in saving their money (M=3.31).
6. Conclusion

This study discussed the relationship between dependent variables i.e money management behaviour and other predictor variables; economic factors, social factors, psychological factors, and access to finance. The results indicated a direct and statistically significant relationship between all the independent variables and the dependent variable (adj. $r^2 = 0.538$). Even though all the proposed variables have a positive and significant effect on the money management behaviour of the university students, it has been seen that the variable, economic factors, are the most influential factors on money management behaviour ($\beta = .376$) while access to finance has the least impact ($\beta= .076$).

In light of the literature, money management behaviour differs across genders, and there is no difference in money management behaviour between students of different academic levels. There no difference between students from different places of residence and students with different working hours; money management behaviour among the students remained the same. Thus in the study proposed, findings indicate that money management behaviour across genders is the same. Money management behaviour differs between students of different academic years, students from different places of residence, different among students of different institutes, different degree levels, different degrees, and also among students with different levels of income.

As every research consists of limitations, this study also contains a limitation that must be addressed before conducting the study in the future. This study was conducted during the pandemic of Covid-19 hence many problems related to the collection of data had to be faced. Due to Covid-19, data was gathered online using a convenient, non-random sampling technique instead of a random sampling technique.

A longitudinal study would be needed to identify how the money management behaviour of university students’ changes over time, which will be helpful for the policymakers in developing productive policies related to finance and education. In future studies, researchers can check out the mediating role of any of the studied independent variables. Researchers can explore other predictors of the money management behaviour of the students.

The present study offers many contributions to the literature concerning money management behaviour. Concerning the influencers of money management behaviour among university students, there is a lack of literature in the context of developing nations. To fill up this gap in the literature, this study enhances our knowledge regarding the influence of access to finance, economic factors, social factors, and also psychological factors on the money management behaviour of university students of Pakistan.
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