Undergraduate Students’ Perspective on Factors Affecting their Academic Performance: A Qualitative Exploration

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Abstract

This research aimed at discovering the factors which affect the academic performance of undergraduate college/university students. Qualitative research design was implied and semi-structured interview was used to collect data. Sample included 15 (N=15, females=10, males=5) students studying in undergraduate programs at different public sector colleges/universities. Thematic analysis was used to find out the factors which affect academic performance of undergraduate college/university students. Three major themes clusters emerged naming positive factors, negative factors and suggestive factors. Both positive and negative factors contained sub themes like psychological factors (e.g. determination, casual behavior) social/external factors (e.g., social support, excessive use of social media) and academic factors (conceptual study, language difficulties) while suggestive themes contained sub themes like steps by students and steps by teachers/institutes. Results have implications for students, teachers and policy makers. Findings may guide both students and institutes in working to improve the academic performance of undergraduate college/university students.

Keywords: Academic Performance, Qualitative Research, Thematic Analysis, Undergraduate Students

Introduction and Literature Review

Academic performance of undergraduate university or college students has always been a topic of interest and importance to researchers. There are many theories which try to explain the factors which in one or other way relate to or affect the academic performance of undergraduate college/university students. Modern research has been trying to formulate many new conceptual or theoretical explanations of academic performance of college/university students. Gopalan et al. (2017) have summarized motivational theories of academic performance where incentive theories (rewards attached to better performance) and arousal theories (to reach maximum arousal for a task) seem to be more related to academic performance of students. Besides, these theories of intrinsic/extrinsic motivation well relate to students’ motivation to perform. They contended that students who are more intrinsically motivated than extrinsically (due to parental pressure, rewards etc.) perform better academically. Gppalan et al. (2017) also argued that social cognitive theory of Albert Bandura also has implications in functioning of undergraduate students as their lives are embedded in social environments and whole of their lives including academic sphere is affected by
their cognitions related to social environment.

Many theories have connected with recently emerging phenomenon of social media use and its relationship with academic performance of undergraduate students (Bernard & Dezandza, 2018; Ozer et al., 2014; Rueda et al., 2017).

In recent years, there has been more focus on role of other factors than just intelligence in academic performance of undergraduate students, which has given this issue a new dimension. Such factors are termed as non-cognitive factors. Non-cognitive factors refer to a wide-encompassing, prolific term and does not solely stand as being opposite to the cognitive factors rather this stands as a comprehensive elaborate term involving broader range of personal attributes, skills and characteristics representing one's attitudinal, behavioral, emotional, motivational and other psychosocial dispositions (Duckworth & Yeager, 2015). There is a lot of research which shows a direct significant relationship of academic performance with cognitive abilities like intelligence (Jafari & Ahmadzade, 2014; Roth et al., 2015). Although most of the literature does not show a direct role of non-cognitive factors in academic performance of undergraduate university students, there is evidence of partial role in form of mediating factors which has been found in numerous studies (Komarraju et al., 2013; Slatten et al., 2021).

Murayama et al. (2013) found that the initial level of academic performance was strongly related to intelligence and motivation and other cognitive strategies explaining additional variance. But they also found that intelligence had no relationship with the progress in academic performance across the years, whereas motivation and learning strategies appeared to be predictors of long term growth in academic performance. Delfino (2019) found a significant positive relationship between different aspects of academic engagement and academic performance of undergraduate students. Another relatively new non-cognitive factor which plays some role in academic performance is grit. Hodge et al. (2018) found a significant positive relationship between grit and academic performance of university students. There are mixed results on role of grit in academic performance of college students. Some studies have supported its positive relationship with academic performance (Mason, 2018) while others have revealed opposite results (Bazelais et al., 2016). Some other researchers have found relationship of academic performance with relatively fragile variables like parental attitude (Ogunsola et al., 2014).

Emotional intelligence is one of most frequently researched variable in relationship with academic performance of undergraduate students. In few studies, it has emerged as a mediator or having partial/indirect relationship with academic performance (Estrada et al., 2021; Hen & Goroshit, 2014; Perera & DiGiacomo, 2013) but in many others, it has been found directly related to academic performance of undergraduate students (Maraiachelvi & Rajan, 2013; Okwuduba et al., 2021; Suleman et al., 2019). Literature confirms the significant role of non-cognitive factors in academic performance of undergraduate students. Another aspect of this issue is that non-cognitive factors like grit, emotional intelligence, academic self-regulation and academic engagement may be largely culture-dependent. Current study aims at finding out which factors affect the academic performance of Pakistani undergraduate college/university students.

Objectives

- To find out the factors which affect the academic performance of
undergraduate college/university students.

- To discover in depth the nature of factors/issues which negatively or positively affect the academic performance of undergraduate college/university students.
- To seek suggestions of undergraduate college/university students on how their academic performance can be improved.

Research Questions

- What factors affect undergraduate college/university students’ academic performance?
- What are the positive factors which play role in increasing the academic performance of undergraduate college/university students?
- What are the negative factors which may decrease the academic performance of undergraduate college/university students?
- What are the suggestions of undergraduate college/university students to increase their academic performance?

Rationale

Literature confirms the significant role of non-cognitive factors in academic performance of undergraduate students. Another aspect of this issue is that non-cognitive factors like grit, emotional intelligence, academic self-regulation and academic engagement may be largely culture-dependent. Pakistan is a collectivistic society where opinions of other greatly affect individuals and sometimes intervene in their lives. These different cultural dynamics affect the academic performance of the students as well. Current study aims at finding out which factors affect the academic performance of Pakistani undergraduate college/university students.

Method

Qualitative research design was used to explore the factors affecting the academic performance of undergraduate college/university students. Nature of the study was mixed as students shared their objective opinions about what factors played role in their academic performance and also shared personal experiences on the topic. Thematic analysis is best choice for such kind of research questions as it is a flexible method and can be used both with essentialist/realist and constructionist epistemological approaches (Braun and Clarke, 2006). Although current study tends to be essentialist, it may also have some constructionist aspects as well.

Sample

Sample comprised of 15 (N=15, females=10, males=5) students studying in different public sector universities of Pakistan. Only those students were included who were studying in some public sector college/university. Both colleges and universities were included because in government sector, BS (Hons) students face just slightly different issues in both sectors.

Interview Protocol

A semi-structured interview protocol was developed to explore the factors affecting the academic performance of undergraduate college/university students. The protocol included questions like following:

- How do you define academic performance of undergraduate students?
- As a student, what are your thoughts on your own academic performance?
- What affects an undergraduate students’ academic performance? (Factors on part of students like determination to learn / weak students fail to get attention of teachers).
Factors affecting Academic Performance

Hassan & Masood

What affects your academic performance?
What do you know about nature of non-cognitive factors which play role in academic performance?
In your opinion, what should be done to improve undergraduate students’ performance?

Ethical Considerations
The study got approval from Advance Studies and Research Board (AS & RB) of University of the Punjab, Lahore. All participants were explained the nature of the study before data collection. Participants were assured that their privacy and confidentiality would be maintained. Participants were told that they could leave the study whenever they want.

Table 1
Characteristics of Sample (N=15)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Family System</th>
<th>Family Income</th>
<th>Father Occupation</th>
<th>Mother Occupation</th>
<th>No. of Siblings</th>
<th>Birth Order</th>
<th>Discipline</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>18</td>
<td>Nuclear</td>
<td>0-70000</td>
<td>Business</td>
<td>House wife</td>
<td>5</td>
<td>4th</td>
<td>Science</td>
<td>3rd</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Nuclear</td>
<td>71000-140000</td>
<td>Doctor</td>
<td>House wife</td>
<td>4</td>
<td>3rd</td>
<td>Science</td>
<td>7th</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Nuclear</td>
<td>71000-140000</td>
<td>Business</td>
<td>House wife</td>
<td>5</td>
<td>1st</td>
<td>Science</td>
<td>7th</td>
</tr>
<tr>
<td>Female</td>
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<td>Joint</td>
<td>0-70000</td>
<td>Business</td>
<td>House wife</td>
<td>5</td>
<td>Last</td>
<td>Arts</td>
<td>8th</td>
</tr>
<tr>
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<td>71000-140000</td>
<td>Journalist</td>
<td>House wife</td>
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<td>2nd</td>
<td>Arts</td>
<td>8th</td>
</tr>
<tr>
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<td>0-70000</td>
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<td>Arts</td>
<td>6th</td>
</tr>
<tr>
<td>Female</td>
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<td>71000-140000</td>
<td>Business</td>
<td>House wife</td>
<td>3</td>
<td>Last</td>
<td>Science</td>
<td>7th</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Nuclear</td>
<td>71000-140000</td>
<td>Business</td>
<td>House wife</td>
<td>5</td>
<td>1st</td>
<td>Science</td>
<td>7th</td>
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<tr>
<td>Female</td>
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<td>Nuclear</td>
<td>71000-140000</td>
<td>Business</td>
<td>House wife</td>
<td>5</td>
<td>2nd</td>
<td>Science</td>
<td>8th</td>
</tr>
<tr>
<td>Male</td>
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<td>House wife</td>
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<td>1st</td>
<td>Arts</td>
<td>6th</td>
</tr>
<tr>
<td>Male</td>
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<td>house wife</td>
<td>3</td>
<td>2nd</td>
<td>Science</td>
<td>6th</td>
</tr>
<tr>
<td>Male</td>
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<td>0-70000</td>
<td>Business</td>
<td>Housewife</td>
<td>6</td>
<td>6th</td>
<td>Arts</td>
<td>7th</td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>Nuclear</td>
<td>0-70000</td>
<td>Business</td>
<td>House Wife</td>
<td>4</td>
<td>3rd</td>
<td>Science</td>
<td>6th</td>
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<td>Male</td>
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<td>0-70000</td>
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<td>House wife</td>
<td>3</td>
<td>2nd</td>
<td>Science</td>
<td>6th</td>
</tr>
<tr>
<td>Mean</td>
<td>21.13</td>
<td>SD</td>
<td>1.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: LHV= Lady Health Worker, SD=Standard Deviation
Data Analysis
Thematic analysis has been adopted in order to glean the most repetitive themes and subthemes from the respondents’ responses. The goal of a thematic analysis is to identify themes, i.e. patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue (Maguire & Delahunt, 2017). For developing themes from data, the six phase framework by Braun and Clarke (2006) was used. It comprises following steps: become familiar with the data; generate initial codes; search for themes; review themes; define themes and write-up.

Results
Responses from this sample were first coded in single table all together. After that, similar responses were categorized in same groups. In the final form, data emerged at three levels. Three basic or broader themes named positive factors, negative factors and suggestive factors with three sub themes in each category were emerged. Sub themes further comprised codes which are distinct and mutually exclusive.
From thorough analysis of transcripts, three major trend/themes or clusters emerged from qualitative interviews of students. First cluster is named as positive factors affecting academic performance of undergraduate students. Second cluster is given title of negative factors which may deteriorate the academic performance of undergraduate students. The third cluster is named as suggestive factors which include all the points students raised which they thought would improve their academic performance. Titles of first and second cluster are different but sub-themes in these clusters have similar categories, although codes in these categories vary and are distinct from each other.

Table 2
Summary of Major Themes, subthemes and Verbatim of Participants (N=15)

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Sub themes</th>
<th>Codes</th>
<th>Verbatim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Factors affecting academic performance</td>
<td>Psychological trait/personal factors</td>
<td>Goal-directed behavior, Internal motivation, Ability to manage stress, Determination, Intentions, Interests, Punctuality, Extraversion</td>
<td>“Interests are important. If a student is interested in studies or study-related activities, he will obviously do better in exams.”</td>
</tr>
<tr>
<td></td>
<td>Social/External Factors</td>
<td>Academically oriented friends/company, Good communication skills, Good social skills, Emotional support, Cooperative parenting, Consulting friends/group study</td>
<td>“If parents are not only concerned but cooperative too, they can help the student in many ways to improve their academics.”</td>
</tr>
<tr>
<td></td>
<td>Academic skills/factors</td>
<td>Good written expression, Smart work rather than hard</td>
<td>“It is important to learn what you have to do”</td>
</tr>
<tr>
<td>Factors affecting the academic performance</td>
<td>Psychological trait/personal factors</td>
<td>Social/External Factors</td>
<td>Academic skills/factors</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Negative factors</td>
<td>work, Conceptual study, Availability of good teacher</td>
<td>Excessive use of social media/gaming, Away from family, Poor socioeconomic background, Limiting oneself socially, Distractions like friendships/relationship issues</td>
<td>Impacts of Covid-19 (Online classes), Hostel residence, Neglect by teachers, Feeling discouraged by teachers, Enrollment in wrong degree due to parental pressure, Language difficulties, Studying for time pass, Not getting full benefit from teacher, Studying at last moment, Directionless hard work, Making first negative impression of teacher, Not questioning the teacher, Missing the classes leading towards poor adjustment in class, Negative perceptions about teachers</td>
</tr>
<tr>
<td>Psychological factors</td>
<td>Casual behavior, Staying in comfort zone, Lack of confidence, Lack of good/strong observation</td>
<td>“There are many other things in lives of students like relationships issues which take a lot of time and attention out of their studies.”</td>
<td>“Many students are not doing well because they don’t want to do the degree they are forced to do.”</td>
</tr>
</tbody>
</table>

“Work, Conceptual study, Availability of good teacher actually, rather than how much you have to do.”

“If you don’t come out of your comfort zone to achieve high, you cannot be successful in these times of great competition.”

“If you don’t come out of your comfort zone to achieve high, you cannot be successful in these times of great competition.”
Factors affecting academic performance of undergraduate students

Discussion
In major theme of positive factors, the first sub-theme that emerged was psychological traits or personal factors which contribute to better academic performance of undergraduate college/university students. It included codes like consistency, goal-directed behavior, internal motivation,
managing stress, intentions, interests, punctuality and extraversion. All of these traits, more or less appear to be relatively consistent in people. Many studies discovered motivation as key factor affecting students’ academic performance (Bailey & Phillips, 2016; Sivrikaya, 2019). Abdulghani et al. (2014) in their qualitative exploration of academic performance of undergraduate students found the internal motivation as key factor in better academic performance. Same sub-theme of psychological factors emerged for negative factors which may affect the academic performance of undergraduate students. It included codes like casual behavior, staying in comfort zone, lack of confidence and lack of good/strong observation. Jouhari et al. (2015) found out personal inhibiting factors in academic performance of undergraduate students which included lack of motivation, lack of ability to make time tables and carelessness. Another sub-theme in positive factors was named as social or external factors which contribute to academics-oriented friends/company, good communication skills, good social skills, emotional support, cooperative parents and consulting friends/group study. Bergamann et al. (2019) discovered positive effects of friends and family support for undergraduate students. Family environment and psychological/social support from the family helps students focusing on their studies (Jouhari et al., 2015). Parenting styles have been found affecting the academic performance of students (Pinquart, 2016). Important role of social support and cooperative parenting was discovered by Cavzos et al., (2010) in their qualitative exploration of resilient undergraduate college students. Same sub-theme for negative factors included codes like excessive use of social media/games, poor socioeconomic background, living away from family (hostel residents) and distractions like friendships/relationship issues. Students reported excessive use of social media leading to time wastage, distraction from studies, academic procrastination and poor academic performance (Ozer et al., 2014). Use of social media by undergraduate students almost goes same for all the cultures. Therani et al. (2017) discovered in a study at a nursing college of Karachi that students deemed all the external factors like teachers, teaching methods and environment of the institute as responsible for their academic performance.

Third sub-theme in positive factors is related to academics which included good written expression, smart work rather than the hard work, conceptual study and availability of good teachers. Students reported their learning improved when they learned with peers and sought help from them (Jouhari et al., 2015). Same sub-theme for negative factors included codes like impacts of COVID-19 epidemic, online classes, language difficulties, enrollment in degree without personal interest, studying for time pass, studying at last moment, making first negative impression of teacher, not questioning the teacher, missing the classes lead towards poor adjustment in the class and negative perception about teachers. Medical students reported dissatisfaction with teachers as a stressor (Weber et al., 2019). Language barrier has been reported in both foreign students and sometimes the local ones whose mother language is not same as medium of studies. Abdulghani et al. (2014) reported language difficulties for Singaporean nursing students. Yuan (2011) reported experiences of language barriers for Chinese students studying in USA. Their professors urged that students must immerse themselves in English language for better performance in studies. While Chinese have local language for higher studies in their country, in Pakistan almost all higher education programs are in English so
students, particularly those belonging to rural areas or not having modern schooling face great difficulties.

The last major cluster named suggestive themes included sub-themes named as steps by the students and steps by the institutes/teachers or family. Steps by the students included codes like prioritizing the studies, creating environment which enhances learning, making and following time tables, getting extra coaching and avoiding procrastination. Abdulghani et al. (2014) found out that high achievers prioritize their learning needs. They appeared to be more regular in classes and had active class participation. Steps by institutes/teachers/family included codes like more practical work along with theory, more case studies, fostering critical thinking, a good student counseling service and awareness campaigns about the role and importance of non-cognitive factors in academic performance of undergraduate students. Needs of more case studies, practical work and improved labs have been expressed by the students in various studies (Abdulghani et al., 2014; Jouhari et al., 2015). In various studies, college students reported seeking counseling services and socializing with friends as coping strategies to deal with academic stress (Jouhari et al., 2015).

There are some codes in certain sub-themes which have not been frequently reported in previous literature and can be understood in cultural context. Codes including intentions, smart work rather than hard work, casual behavior, staying in comfort zone and being enrolled in a degree just due to parental pressure and not personal interest may be occasionally found in previous literature. Loh and Teo (2017) in their study found out significant impact of cultural backgrounds on learning strategies and academic performance of undergraduate students. Particularly factors like choosing wrong degree program succumbing to parental pressure may relate to indigenous collectivist culture where individuals’ choices are affected by others including parents and other family members as well.

**Conclusion**

The findings of current research show that many of the factors revealed in this research have been discovered by many other researchers conducted in different cultures and contexts. Factors like goal-directed behavior, internal motivation, social support, excessive use of social media and negative effects of COVID-19 have been reported by different past researches as mentioned in discussion. Some other factors appeared to be uniquely related to indigenous context, e.g., staying in comfort zone and being enrolled in a wrong degree just due to parental pressure. This appears to be an amalgam of different kinds of contexts and factors which somehow affect how undergraduate students’ perform academically.

**Limitations and Suggestions**

An important limitation of current study is that interviews were conducted online due to prevailing COVID-19 conditions. Live interviews may have some deeper effects as interviewer and interviewee can communicate better in live meeting. In online interviews, when interviewees are reluctant to talk freely, it is hard for the interviewer to break the ice. Another limitation is that male students were underrepresented in the sample. For future studies, an equal number of male and female participants are suggested. Also, an inclusion of focus group to collect data may bring some more detailed responses as triangulation always brings richer data.

**Implications of the Study**

The results of the current study are a substantial addition to the current literature on the topic, particularly in indigenous context. Findings can help the students, teachers and policy makers to review their
strategies and devise more practical plans for the better learning of students.

**Contribution of Authors**
Waqas Hassan: Conceptualization, Methodology, Validation, Investigation, Data Curation, Formal Analysis, Writing- Original draft
Afsheen Masood: Conceptualization, Formal Analysis, Writing- Review & Editing, Supervision

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Hassan & Masood


Factors affecting Academic Performance


