

EDUCATIONAL MOSAIC: UNRAVELING THE COMPLEX FACTORS THAT MOLD SUBJECT PREFERENCES IN TERTIARY EDUCATION ACROSS SINDH"

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Abstract

Education plays a pivotal role in personal growth and national development. Pakistan's education system, though vital, grapples with foundational issues and a shortage of qualified educators, obstructing access to quality education. Despite numerous strategies, the current system remains inadequate, particularly in Sindh. This study delves into the challenges of the education system in Sindh, focusing on limited access, outdated curricula, inadequate teacher training, and gender biases. Gender biases not only constrain career choices but also permeate educational environments, hindering holistic development. Societal norms perpetuate gender-stereotyped career associations, obstructing the alignment of diverse careers with all genders. Additionally, parental influence coerces students into unsuitable subjects, emphasizing university entrance over holistic growth. Addressing these concerns necessitates comprehending the factors that shape students' subject preferences and their repercussions on academic and personal development. This study investigates the determinants behind subject selection and their broader impacts, advocating for an inclusive and high-quality education system. The findings underline the urgency of reforming education in Sindh, ensuring equal opportunities regardless of socioeconomic status or gender. By rectifying the identified issues, a more responsive and effective education system can be forged, nurturing individuals' potential and propelling the socioeconomic advancement of the region.

Keywords: Education system, Pakistan, Sindh, gender biases, subject selection.

Introduction

Education is essential for individual survival and intellectual growth and contributes to the development of a country, particularly economically. However, the education system in Pakistan has faced challenges since its independence in 1947, including deficient educational foundations and a lack of qualified teachers, leading to difficulties in access and quality education. Various educational strategies have been implemented to address these challenges, but the current school system in Pakistan is still not responsive enough to meet the demands for quality education. The current education system in Sindh is characterized by a wide range of issues and concerns, including limited access to education, inadequate teacher training, outdated curricula, and gender biases. The gender biases present in the education system create limitations and barriers to the future potential of individuals, irrespective of their gender. Gender stereotyping is not only related to career choices but also to educational institutions and learning spaces. The societal norms in Sindh have created a mindset where male-oriented careers are not associated with females and vice versa. As a result, the educational

system perpetuates the existing gender norms, creating a stuffed and congested mindset that does not allow for affirmatively acknowledging the allying of male-oriented careers with female and vice versa. Another factor affecting subject selection is parental influence. With the fear of validation and acceptance, parents may neglect the potential and talent of their children and forcefully enroll them in subjects that may not be suitable for them. This manipulation of student subject selection only focuses on getting them into universities instead of fostering their intellectual growth and development. To improve the education system in Sindh, it is essential to identify the factors that influence students' choice of subjects and how these choices impact their academic and personal growth. The study aims to fill this gap by examining the reasons behind students' choice of subjects and their impact on their overall educational and personal development. The study recommends the need for an improved education system that provides equitable and quality education to all students, regardless of their socio-economic background or gender.

Problem Statement

This research is to deduce the factors which affect the student's perception over the subject choice on tertiary level of education in Sindh, and how it is manipulated here to only be perceived as means to get into universities and bound to only the respective reason instead of helping them grow intellectually.

Research Objectives

- To analyse how parents influence a student's perception of subjects on tertiary level.
- To analyse how societal norms and stereo typicality has an impact on student's perception of subjects on tertiary level.
- To analyse how the gender biases/discrimination affects student's perception of subjects on tertiary level.
- To analyse the role of educational institutions over the student's perception of subjects on tertiary level.
- To analyse how archetype of academics affect the student's perception of subjects on tertiary level.
- To analyse the status of art as an academic subject.

Research Hypothesis

H1: Parental influence has a significant impact over the student's perception of subjects on tertiary level.

H2: Societal norms have a significant impact over the student's perception of subjects on tertiary level. H3: Role of Educational institutions has a significant impact over student's mindset of subjects on tertiary level.

H4: Gender stereotyping according to the academic fields has a significant impact over teenager's perception of subjects on tertiary level.

H5: All these factors are the main reason student's prior technical subjects over art. H6: All these factors are the main reason art is still considered as an elite subject.

Literature Review

Education System in Sindh

Education assumes a significant part in the turn of events and thriving of the country. The nature of training is the foundation of public advancement. If we glance back at history, we have a model. Japan, a country that totally declined after the conflict, yet as the maxim goes, "favor the courageous", crushed the disappointment with the assistance of instruction, and with the assistance of the most remarkable schooling. Assuming we dig further, we likewise have instances of China's advancement with the assistance of training. Sindh carried any progressions to the training area, yet it finished in disastrous disappointment. As per the Education and Improvement Report Sindhi Education Statistics, just 45% of schools have electrical offices, 57% of schools have drinking water, 63% have latrines, 61 have dividers, and just 35% of schools are looking great (adb, 2019). In spite of the fact that Sindh is the most elevated supporter of GDP, it actually positions second with regards to schooling quality. In Sindh region, just 47% of schools are directed by educators, 27% of schools work in the homeroom, among a populace of 12 million, a greater number of than 6 million youngsters are out of school, and around half of kids leave essential training prior to finishing their examinations". Sindh has fallen behind the world concerning quality instruction, as the interest for better schools is developing quickly while the stock of value schools is simply not keeping pace." Education assumes a significant part in the turn of events and success of the country. The nature of training is the foundation of public advancement. If we glance back at history, we have a model. Japan, a country that totally declined after the conflict, however as the truism goes, "favor the fearless", crushed the disappointment with the assistance of instruction, and with the assistance of the most impressive training. Assuming we dig further, we likewise have instances of China's advancement with the assistance of instruction (adb, 2019).

The present West rules the world simply because they have understood the essentialness of training to thrive and create. As per United Nations article 26 "Everybody has the privilege to schooling", the condition of training in Pakistan, explicitly in the region of Sindh is nowhere near palatable. Sindh carried any progressions to the educational area, however it finished in devastating disappointment. As per the Education and Improvement Report Sindhi Education Statistics, just 45% of schools have electrical offices, 57% of schools have drinking water, 63% have latrines, 61 have dividers, and just 35% of schools are looking great.

Despite the fact that Sindh is the most elevated supporter of GDP, it actually positions second concerning instruction quality. In Sindh region, just 47% of schools are regulated by educators, 27% of schools work in the homeroom, among a populace of 12 million, a bigger number of than 6 million youngsters are out of school, and around half of kids leave essential training prior to finishing their examinations. The explanations for this are deficient administration/the executives, managerial issues and feeble framework. One more justification behind the disintegration of the training circumstance in Sindh is that the substance of the educational plan is obsolete, and the schedule instructed by schools and universities is equivalent to that of our progenitors. Today, individuals have arrived on the moon, however we actually stick to similar showing strategies and assessment framework, which is something miserable (adb, 2019).Pakistan has a ton of gifts, yet is energizing that the public authority appears to be the most un-worried about the nature of schooling and the utilization of gifts. The sky is the limit,

however the main thing required is commitment and trustworthiness. Youth is the pearl of public turn of events.

Parenting Influence

Parents and Guardians are handed down by the excellence of their position to prepare, direct and direct their children or wards in other to get or secure strict, mental, social, moral, and instructive values. Same is appropriate in the scriptural order to guardians, to prepare their youngsters in the best approach as this would coordinate their way when they become old. The hole here is: How conceivable would this order be assuming the understudies are constrained by their folks to take up subjects that will coordinate their interests towards their children's yearnings, to the impairment of the youngsters' advantage in their own wanted field. Do guardians today concentrate on the aptitudes, mental capacities, interests, assets and impediments of their kids or wards before intriguing impressions are made on their youngsters? This impression by guardians might impact the kid emphatically (adb, 2019).

The parents go by this order to impact their children's decision of subject in optional schools.

Some compromise not to be engaged with the instructive quest for their youngsters or wards if their decision of subject doesn't get together with their own advantages. Therefore, such understudies might be adversely or on the other hand decidedly impacted by this. Tenibaje (2009) didn't mince his perspective when that's what he stated (adb, 2019).

Understudies' scholarly execution is declining at upsetting rate. Consequently, it becomes vital to inquire: The connection between parental effect on subject determination and scholarly execution of understudies in auxiliary schools. Is there a relationship between parental impacts on subject determination? What's more, scholastic presentation understudies in auxiliary schools. Will parentally impact on subject choice foresee the scholarly exhibition of understudies in optional school. These and a lot more is what the concentrate on tries to give replies to and which will shape the fundamental issue of this review (adb, 2019).

Parents' influence on subject selections stems from the continuous process of association with their children (Young et al. as cited in Alphonse, 2016). In analyzing subject selections related conversations between students and their parents, Young et al in Alphonse (2016) found a reconstruction of the relationship between the parents and the students through some aspect of career exploration. In a similar investigation by Keller (2004), he reported that the behaviors of parents seemed to be especially relevant to middle school students. His study findings indicated that, perceived parenting behaviors discriminate between children with high and low career maturity and decision-making self-efficacy scores. Which he noted that in order for parents to boost the career development of their young children, parents should do the following:

- a) Expresses the interest in various adolescents' matters that are relevant to their own children.
- b) Tell their children that they have high expectations for their academic career.
- c) Encourage their children to make their own decisions based on their own interest.
- d) Tell their children they are proud of them.
- e) Assist their children understand the results from interest assessments they have chosen.

According to Hewitt (2010), argues that factors influencing subject selection and career choice among children can neither be intrinsic nor extrinsic nor both. He further stated that most children are

influenced by their parents' favored career, while others follow the career educational choice that is open for them, some students choose to follow their own passion or career regardless of how much or little it will make them. While some choose the particular career that will give them high income in near future. Finally, he posits that, student's perception of being suitable for a particular job also have been found to be influenced by some number of factors including choice of science subjects, level of achievement, differences in job characteristics and ethical background. However, in Parents' influence on subject selections, Borchert in Alphonse (2016) observed that several parental factors that influenced children subjects' selection in secondary schools. They include environmental factors, opportunity factors and personality factors. While Ebong (2015) discovered family background is a major contributory factor to students' subject selection. For Wachira (2018), she listed some parental factors that influenced children subjects' selection in secondary schools to be parental expectations, parent level of education, parent socio-economic status, parental occupation, and parent- child relationship.

Societal Norms

Implanted inside a school's environment are the social and compeer's standards of students. Schools are social settings in which compeer model one another's the way of behaving and mentalities. These gathering mentalities, or normal practices, are extremely strong in shaping the way of behaving. Therefore, teenagers frequently are bound to act as per accepted practices instead of individual well-being. For example, in one review, the best indicators for cannabis use in an example of young people were the standards of their companion bunch. Young people were bound to utilize drugs when they connected with companion bunches who decidedly supported its utilization. Peer impact is significant in the obtaining of perspectives and normal practices among youths. The method involved with "obtaining "qualities of companions is deeply grounded. Peers have been displayed to influence each other on degrees of sorrow, animosity, and different ways of behaving and qualities. These impacts happen on numerous levels. Because of young adults' inspiration to frame connections, they endeavor to improve shared traits inside peer gatherings, instead of contrasts. On a more extensive level, beyond peer gatherings, youths are impacted by and inspired to stick to bigger gathering standards. The more extensive gathering gives explicit environment standards that are ideal or not great. These messages major areas of strength for becoming of the juvenile way of behaving and influence bunch having a place, a particular inspiration for this formative stage (Pauker et al., 2015).

Because of this respective impact of compeers' standards on vastly connected gatherings and more extensive social affiliations, for example, a student's grade level, the perspectives of friends are a significant effect on a student's accomplishment. Companion bunches who underwrite positive or negative qualities in regards to scholastics can significantly affect the accomplishment of the student. Pupils who reportedly have more bad friend values with respect to school have less school commitment than pupils who support lower levels of negative companion values. This is significant as school commitment is firmly connected with scholastic results, for example, grades and grades. By and large, underwriting lower scholastic assumptions perform much the same way as these assumptions. This is especially striking for minority pupils in settings with low scholastic assumptions (Yakavets,2016).

Role of Educational Institutes

While appropriately observing that world-class private establishments are grounded and based on custom, Cookson, and Persell (2010) concentrate on communicating the significance of the change that the educational programs of reputable schools definitely went through somewhere in the range of 1985 and 2010. As the United States travelled through the 20th 100 years, American culture was progressively classed and separated and these class distinctions reflected social, cultural, and monetary issues from one side of the country to the other. Because of and with the guidance of a more innovatively progressed period, not in the least did American culture and societal change after some time, however, so did the worldwide scene.

Cookson and Persell (2010) set that one justification for the adjustment of first-class educational programs was in light of America's need to keep up with its status as a worldwide pioneer. Since schools have social and social regenerative propensities, the best approach to actually deliver and keep a world-class populace and notoriety is to modify the educational programs of schools to reflect current social, cultural, and monetary patterns and needs. The secret educational plan will be vital in understanding the significance of this review due to how it connects with the implied and double elements of school and their regenerative propensities. Then, social class and social class portability will be characterized, and the manners in which that workmanship and information on human expressions reify one's situation in a social order will be elucidated.

Gender Stereotyping

In Pakistan, there is a significant orientation difference in training. Pakistan is a man-centric culture wherein ladies face an extensive variety of discrimination, prompting a low friendly, financial, and political status. Ladies include 52% of Pakistan's complete populace, as indicated by World Bank measurements. Keeping such an enormous part of the populace unskilled is what is going on, and it very well may be the main driver of the nation's delicate and disproportionate economy. Pakistan is situated fourth most terrible on the planet for orientation equality in the 2021 Global Gender Gap Report. As far as instructive fulfillment, Pakistan is positioned 144th out of 156 nations in the report. Pakistan's whole schooling system has a 13 percent orientation divergence in enrolment. What's more, simply 46.5 percent of ladies are proficient, 61.6 percent went to grade school, 34.2 percent achieved secondary school, and 8.3 percent went to tertiary training. There are deficient government schools for youngsters, or those that are accessible are distant to schoolchildren. The circumstance is altogether more terrible in Pakistan's country regions, where schools need basics like water, power, and other instructive necessities. At the point when orientation disparity in schooling rises, it affects a family's financial position (adb, 2019).

As a result, the public authority ought to reevaluate its regulations and standards to quickly span the orientation hole. Expressly, ladies' schooling further develops social targets like teaching the approaching age, forestalling kid mortality, diminishing richness, and improving youngster sustenance. On the other side, such friendly objectives dynamically affect the economy, for example, lessening destitution, further developing work efficiency, human turn of events, and in the long run driving financial development. Further developed orientation equality and ladies' cooperation in monetary exercises are firmly attached to social and financial advancement. Ladies' schooling, well-being, and independence are fundamental for the human turn of events and long-haul steadiness. Pakistan will in

general slack in every single basic boundary. Only training is deficient to empower ladies to enter the workforce in Pakistan because of customary authoritative opinions and social traditions. Adolescent pregnancy is the main social component driving young ladies to quit, while children are given a need in accomplishing schooling, especially tertiary level of Education(adb,2019).

Technical Subjects over Art

It was quite a long time before when the decision was equally spread across all disciplines, with expressions having a slight edge over the others? Individual fitness, the work market, and the limit accessible in universities of Sindh decided a definitive picture that arose. Today fitness has almost no opinion valued by anyone. In 2018, 60,382 understudies showed up in the Inter-Science (pre-clinical, pre-designing, and general science bunch) assessments, 39,192 in Inter Commerce, and just 14,041 in Inter-Arts. Some others showed up secretly however they were the extras who neglected to acquire confirmation in school or had picked to concentrate on being uninvolved as they worked. Very few individuals notice that minimizing the sociologies suits the people pulling the strings. Aesthetic sciences urge pupils not to acknowledge everything they are saying without clarifying pressing issues. Dictator rulers love a consistent populace. It is a pity that this pattern towards dismissing the sociologies is on the ascent. Humanities students are viewed as being non-serious and subjects like civics, history, and instruction are named as 'delicate' disciplines that don't add to the advancement of society. One certain result of this has been the response that has set in.

Various non-governmental colleges that have grown in the territory throughout the last many years (74 out of a sum of 177 colleges) offer human sciences. Nonetheless, given their high expenses, they are past the span of the greater part. The truth of the matter is that today the primary. Consider the selection of subjects is the initial they accommodate the rewarding position. Expressions don't land one too paid a task as science and trade, so our experience shows. Thus, the general picture for aesthetic sciences remains very disheartening. This is troubling on the grounds that it is generally perceived that the investigation of humanities makes individuals think fundamentally. The sociologies are the best course for an individual's brain, and they can be best in achieving conduct changes in the public eye. The truth of the matter is that we want individuals who can convey and explain, have sympathy, and are innovative. As per LinkedIn, a site for proficient systems administration, the most pursued by bosses for 2019 are delicate abilities like 'individuals on the board' that incorporate influence and joint effort. A few colleges in Pakistan are attempting to direct their science and business the executives' disciplines by presenting human sciences subjects in their projects (adb, 2019).

Methodology

The purpose of this study was to culminate the factors and respectively identify the factors that significantly impact the decision-making process of the students' aspects of major subject. For the purpose, different methodologies were adapted. For that, the research was done of qualitative and quantitative analysis of the quality of service. The following research report is based upon a survey that was carried out for the enhance observation upon the respective topic cast-offed to contemplate the crucial on-going. The format of that was contemplated for the respective survey was Google Forms which designed which were sent off to different groups, the specialists and some relatives that are into the respective industry with a frequent rate to fill out those forms. The reason to do so was to analyse how the people in different aspects under the same circumstance investigate the respective services

obtained in respective firm. It was descriptive research where we inherited information from people collected the forms and interpreted the consistent use, it also helped to observe the studies in a completely natural and unchanged natural environment and helped with less time consumption. The Simple random sample approach was procured to make it justifiably user-friendly and understanding and comparatively this is the most convenient method of conducting survey collection information with many people and had the maximum accuracy rate of the collected information.

Also, the agents took abundant amount of time as they had busy schedules, but some sources helped tracking them down eventually. Particularly their response held an important role in the research as they've the vast exposure to all problems and how about the topic.

Qualitative methods were picked for the survey, as it's reliably used to 'grasp social attribute of the different views of various individuals that were involved, to contextualize issues in the specific socio-social political milieu, and sometimes change or change social circumstances' (Glesne, 2006, p.4). This technique for research includes 'a ton of interpretive, material practices that makes the world recognizable.' (Denzin and Lincoln, 2011, p.3). With a definitive target of this review, we look for the confirmation of arising classes and emergency the pioneers among the pleasantries the board and bosses to conceptualize inventiveness. It casually involves multiple steps of data collection and information refinement.

As far as it's concerned with choosing qualitative method of research for our research, it helped us with: - Making sense of complex situations or social processes.

- Learn from participants about their experiences (beliefs, motivations, opinions).
- Construct a hypothesis/theory from data Understand phenomena deeply and in detail.

Types of Data

The questionnaire consisted of several easy questions prompted to gather the most precise piece of information. Options were given, no detailed answers were required that made it feasible for people to fill it out and tables were used for various questions to make it understandable and easier for us to collect the information. The obstacle we faced was not being able to conduct the survey on board with people that would have been very opportunist with their shared experiences to have a deeper knowledge not only about the research topic but also different opinions and point of views on how human psychology adapts to the strategies to provide us a better disclosure.

Results and Findings

Participants and Demographics: Participants selected for this focus group discussion are all students but of different ages, socio economic backgrounds, educational backgrounds (school passed, high school graduates, university students)

Group 1: Students from age span of 14-16 who have passed their school recently and are applying for colleges. **Group 2:** Students who are high school graduates and age span is from 17 to 19 and they are applying for universities.

Group 3: Students who are currently studying at universities with science or arts as their respective core sub.

Findings

- The perception over choosing subjects In High School is dependent upon the interests of the individual.

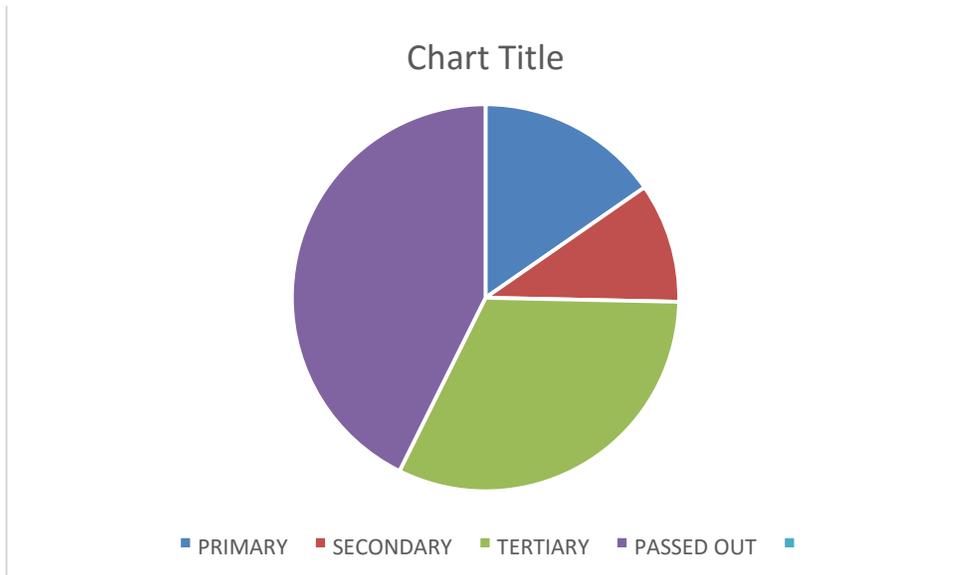
- Majority stated that students more likely prefer science subjects over art these days.
- Minority disagreed on this issue.
- There were mixed opinions on this query, some stated that arts are an easy way out, some stated that it's always a backup plan, while some defended their idea that Arts is sometimes a student's first choice, they gave their own example for instance.
- Majority said their priority was science subjects and minority said that their priority was Arts.
- It was a mixed audience of different backgrounds and goals, so it was concluded that the choosing of fields is discriminated based on gender and potential surprising.
- The concept of science fields being more difficult and Arts and Humanities being a piece of cake has created a leap of mindset in our generation and they stated that science students are more likely to be more hardworking and intelligent as compared to arts students.
- As compared to previous times arts is valued now. Comparison shows that either this field had great value and scope since the beginning or only the conservative mindset of the society was the hurdle between the eyes to recognize it has great scope now as it has shown vast exposure to students now.
- It is a misconception if we see it now as it has gained great importance and has grand scope nationally and internationally as well. And it was a mindset and somehow is continuing to be this way until the generational gap disputes are solved and more awareness of Art fields is spread among masses of all kinds.

Moreover, following are the reasons compiled when parents forcing their children:

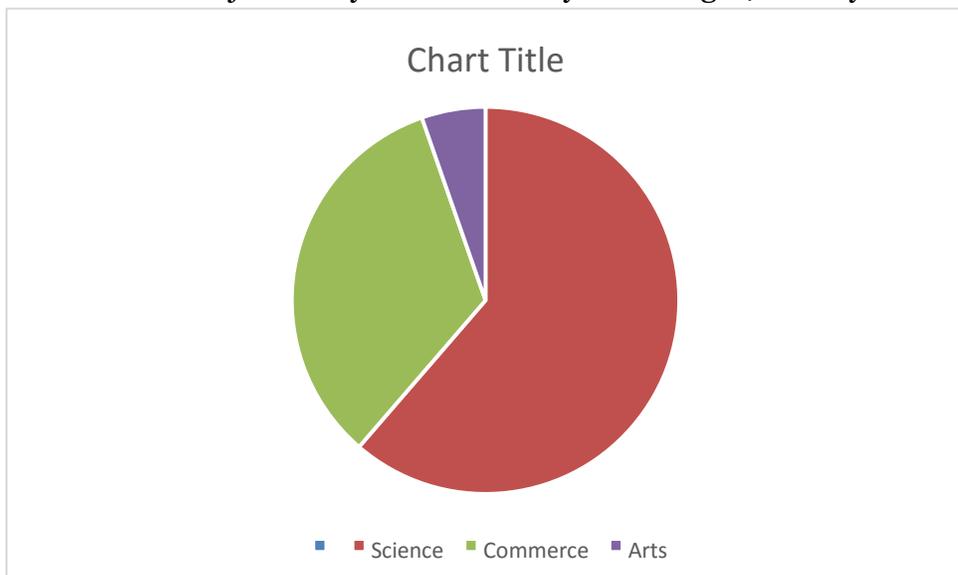
- Prestige & bragging value / pride
- Treating children as an investment
- A doctor/ lawyer/ engineer = more \$ = better life
- Playing it safe & “safe” life - Inertia.
- Peer pressure.
- Following the rules/ tradition.

Moreover, Quantitative Method in form of Questionnaire, was adopted to collect the data of the people's perception. The results are following:

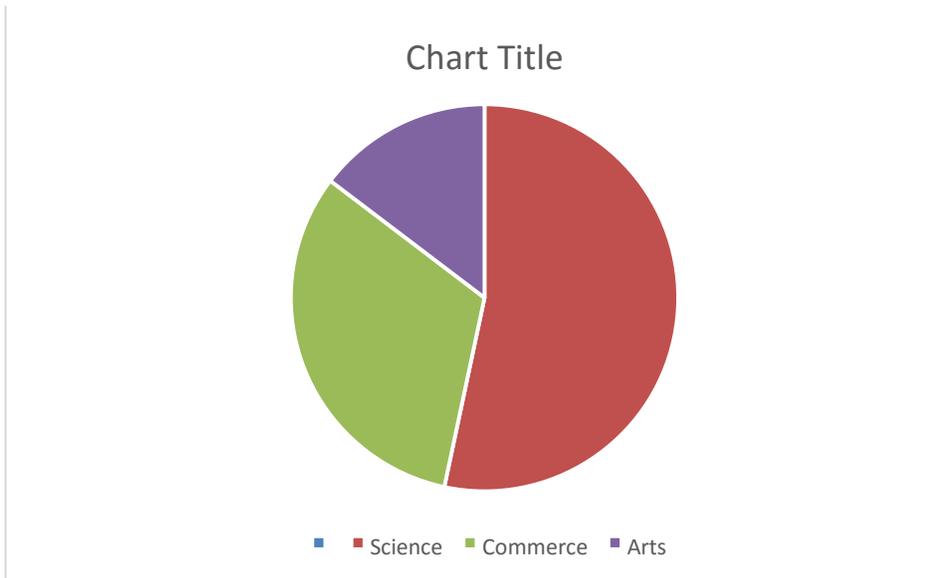
- 1- Name
- 2- Are you a student?
- 3- What level/grade are you in?



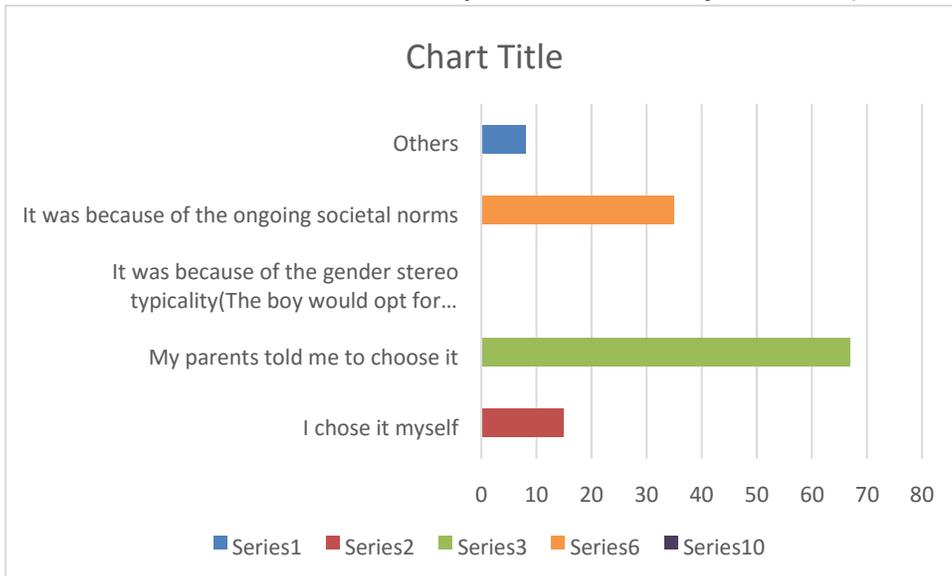
4- What major have you chosen for your college (Tertiary Level Education)?



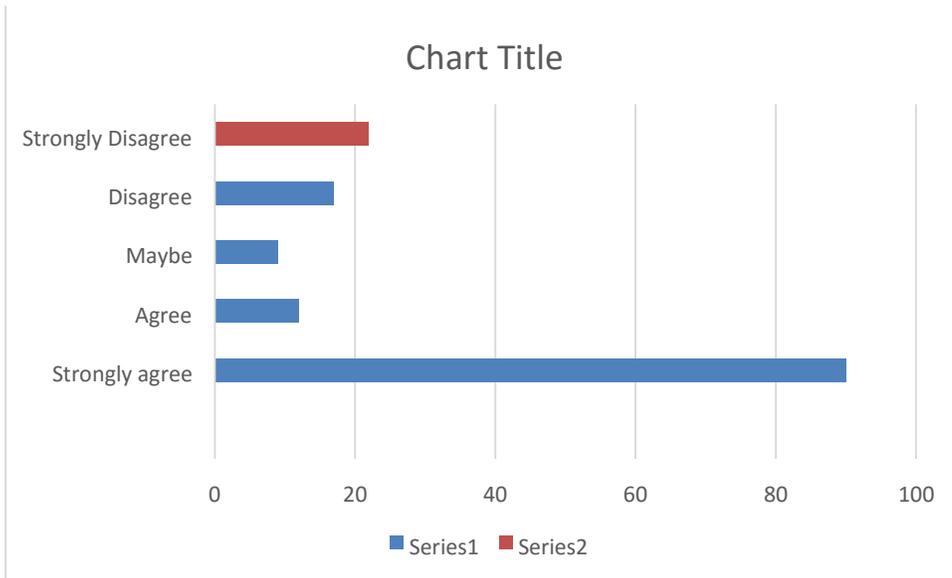
5- If yet to choose, which major will you choose for your college ((Tertiary Level Education)?



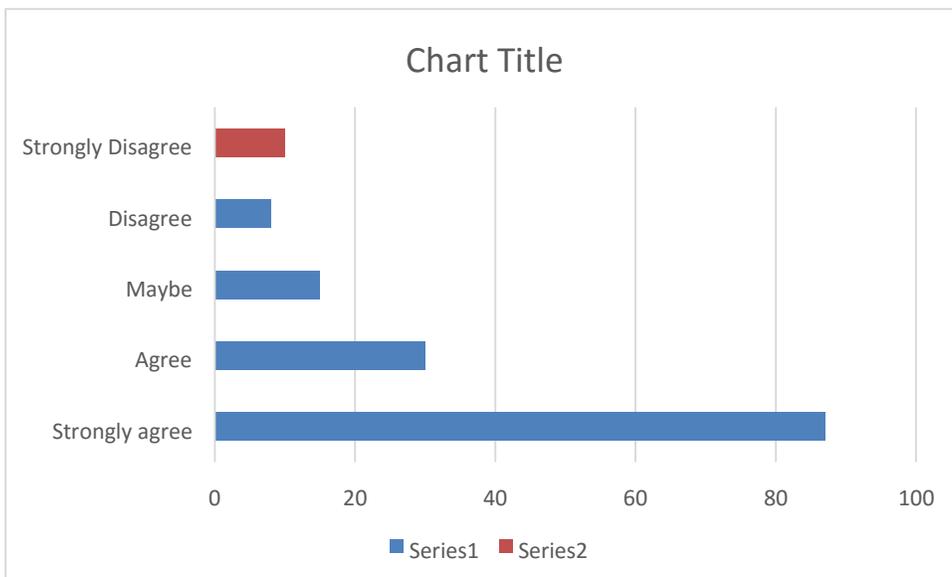
6- What was the reason that you chose the major chosen/ or will you choose the major?



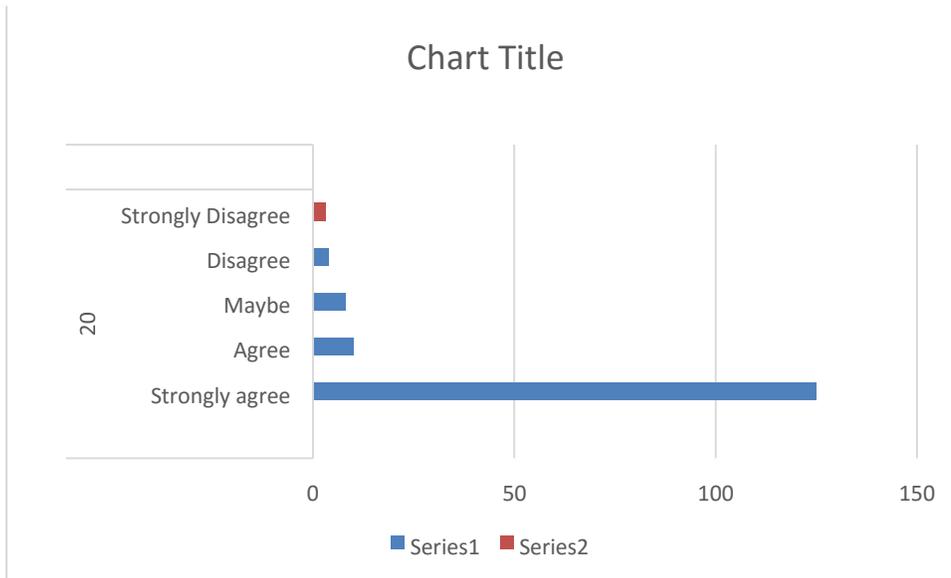
7- The Educational institutions of Pakistan have tended the student to think that the reason to study is to merely pass on to another grade/class and not to actually study or attain education. Do you agree?



8- Do you agree that Gender Stereo typicality in regard to educational fields exists? (For example: The male students should only opt for science subjects, yet the girls would only opt for medicals.) and that it has a significant impact on students' mindset of subjects at the tertiary level?



9- Do you agree that the following factors: Parental influence, societal norms, and gender stereo typicality, have a huge impact on the students prioritizing technical subjects over art?



From the data gathered, we collected 150 responses out of them. Out of which, 59% of the respondents were students, while the other 41% were the passed out/ graduated people. Hence, the data became more authentic as the people currently in the situation comprehended it more. It can be identified that out of those people, 61% of the students have had been affiliated with science as their major, 33% as Commerce whilst only 5% of them as the Art. Major fluctuations between the percentages and Art opted by only 8 people out of 150, the near to no ratio. Although they were extremely reluctant for many reasons including the mindset that they've built from generations that Art doesn't has any scope, is not notified, and considered to be some subject only elite people opt for, or some "luxury." However, the two major reasons that were deduced were again, the allowance from the parents, and the fear of invalidation. Comprehending further, we also observed that the reasons for these choices has had not been dependent on the self yet highly dependent upon their parents choosing it for them, or either they are choosing it under the pressure of society or the ongoing ritual stereotypes.

The role of educational institutions has had mostly been more of the pass onto the next grades yet not to perceive any knowledge/ become literate, Says the 90% of the respondents.

Conclusion

Arts assist us with contemplating large issues, for example, environmental change and hereditary alteration that are established in science. Also, in the period of "large information" where researchers examine billions of occasions hurled by regular or social peculiarities, one of the main approaches to understanding it is through representation. There is tremendous possibility here for commitments from specialists if by some stroke of good luck, we'd let them. The last time scientists recognized, workmanship, science, innovation, and designing were totally enmeshed. From the music business to medication, to media, to the plan of structures, textures, and grain parcels. Artistic expressions don't simply prettify innovation, they drive and epitomize development. It's pointless and confounding to consider one more significant than the other when they are inseparably associated with significantly significant communications. We live in a time where there is a genuine interest in computerized abilities that cross all areas, and especially incorporate human expression. This focus group discussion concluded that arts and medical/engineering students had a variety of similar opinions on the mindset

and general scope of the two different disciplines. Whereas when it came down to devaluation and prioritization, the debate answered the agreement to be settled as a disagreement. Both disciplines stand at their own places when it comes down to value. They have their respective scopes but here we took mindsets influenced by Pakistani society mentality, so the conclusion came that it's not a mindset neither a misconception. A mixture of both, which is promoting a conservative mind culture to our coming generations.

References

- Adb (2019). Sindh Secondary Education Improvement Project: Report and Recommendation of the President. Retrieved from <https://www.adb.org/projects/documents/pak-51126-002-rrp>
- Agha, N., Syed, G. K., & Mirani, D. A. (2018, January). Exploring the representation of gender and identity: Patriarchal and citizenship perspectives from the primary level Sindhi textbooks in Pakistan. In *Women's Studies International Forum* (Vol. 66, pp. 17-24). Pergamon.
- Akaninwor, G. I. K. (2006). *A Handbook on Research Methods and Statistics (Paradigms in Education, Science and Technology)*. Port Harcourt: Wilson Publication CO. Ltd.
- Ali, S. (2011). Policy analysis of education in Sindh. *United Nations Educational, Scientific and Cultural Organization (UNESCO)*.
- Bhatti, A., Pathan, H., Tabieh, A., & Hassan, A. (2020). Impact of learner-learner rapport on L2 learning: A study of public sector universities in Sindh, Pakistan. *The Asian EFL Journal*, 27(4), 204-226.
- Boivin, M. (2020). The set-up of the colonial knowledge on Sindh. In *The Sufi Paradigm and the Makings of a Vernacular Knowledge in Colonial India* (pp. 29-68). Palgrave Macmillan, Cham.
- Buikstra, E., Eley, R. M., & Hindmarsh, N. (2007). Informing rural and remote students about careers in health: Factors influencing career decisions. *Australian Journal of Rural Health*, 15(5), 289-295.
- Cislaghi, B., & Heise, L. (2020). Gender norms and social norms: differences, similarities and why they matter in prevention science. *Sociology of health & illness*, 42(2), 407-422.
- Codioli McMaster, N. (2019). What role do students' enjoyment and perception of ability play in social disparities in subject choices at university?. *British Journal of Sociology of Education*, 40(3), 357-377.
- Commission of National Education, (2012) Report of Commission on National Education,
- Dr. Ishtiaq Q. H. (1999). Education in Pakistan, Bureau of Composition, Compilation and Translation, University of Karachi Education Policy 1998-2010

- Echem, N. I. (2016). The factors Influencing Choice of School Subjects by Senior Secondary School Students in Oredo LGA., Edo State. Retrieved 25/10/2018 from www.scharticles.com.
- Ferry, N. M. (2006). Factors Influencing Career Choices of Adolescents and Young Adults in Rural Pennsylvania. *Journal of Extension*, 44 (3), 1-6.
- Fulgini, A. J. (1997). The academic achievement of adolescents from immigrant families: The role of family background, attitudes, and behavior. *Child development*, 68(2), 351-363.
- Grey, A. C. (2009). No child left behind in art education policy: A review of key recommendations for arts language revisions. *Arts Education Policy Review*, 111(1), 8-15.
- Islam, K. M. M., & Asadullah, M. N. (2018). Gender stereotypes and education: A comparative content analysis of Malaysian, Indonesian, Pakistani and Bangladeshi school textbooks. *PLoS one*, 13(1), e0190807.
- Jafri, I. H., Soomro, M. S., & Khan, R. A. (2011). ICT in distance education: improving literacy in the province of Sindh Pakistan. *The Sindh University Journal of Education-SUJE*, 40.
- Jerrard, J. (2016). What does “quality” look like for post-2015 education provision in low-income countries? An exploration of stakeholders’ perspectives of school benefits in village LEAP schools, rural Sindh, Pakistan. *International Journal of Educational Development*, 46, 82-93.
- Jungen, K. A. (2008). Parental influence and career choice: How parents affect the career aspirations of their children.
- Juster, H. R., Heimberg, R. G., & Engelberg, B. (1995). Self selection and sample selection in a treatment study of social phobia. *Behaviour Research and Therapy*, 33(3), 321-324.
- Kazmi, S. W., & Quran, H. (2005). Role of education in globalization: A case for Pakistan. *SAARC journal of human resource development*, 1(1), 90-107.
- Kikechi, W., Owano, A., Ayodo, T. M. O., & Ejakait, E. (2013). Factors influencing choice of technical subjects among the secondary school graduates in Kenya. *International Journal of Innovation Research and Development*, 2(11), 381-391.
- Mabunda, N. P. (2002). The Role of the School in Preparing School Leavers for Self-Employment. Unpublished Doctoral Dissertation.
- Madden, M. (2011). Gender stereotypes of leaders: Do they influence leadership in higher education?. *Wagadu: A Journal of Transnational Women's & Gender Studies*, 9.
- McGuigan, M., McNally, S., & Wyness, G. (2016). Student awareness of costs and benefits of educational decisions: Effects of an information campaign. *Journal of Human Capital*, 10(4), 482-519.

- Mosetse, P. (2006). *Gender stereotypes and education in Lesotho* (Doctoral dissertation, University of the Free State).
- Muhammad Ahsan. "An analytical review of Pakistan's educational policies and plans",
- Mujahid, N., & Noman, M. (2015). Infrastructure Availability in the Public Sector Schools: A Case Study of Sindh Province. *Journal of Education and Practice*, 6(4), 60-67.
- Nagy, G., Trautwein, U., Baumert, J., Köller, O., & Garrett, J. (2006). Gender and course selection in upper secondary education: Effects of academic self-concept and intrinsic value. *Educational research and Evaluation*, 12(4), 323-345.
- Nehal A. (2004). *Dictionary of Secondary Education*, A.P.H. Publishing Corporation, New Delhi
- Pandey, R. C. (2008). Academic Achievement as Related to Achievement Motivation and Parental Background. *Indian psycho*, 70 (4), 213-216.
- Pauker, K., Apfelbaum, E. P., & Spitzer, B. (2015). When societal norms and social identity collide: The race talk dilemma for racial minority children. *Social psychological and personality science*, 6(8), 887-895.
- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological journal*, 20(1), 7-14.
- Polansky, N. A., Chalmers, M. A., Bittenwieser, E. W., & Williams, D. P. (1983). *Damaged parents: An anatomy of child neglect*. University of Chicago Press.
- Sahito, Z., & Väisänen, P. (2018). Quality in teacher education: Evidence from the Universities of Sindh, Pakistan.
- Saito, Y. (1998). The aesthetics of unscenic nature. *The Journal of Aesthetics and Art Criticism*, 56(2), 101-111.
- Salahuddin, A. (2017). *Women's lives and images: Traditional symbolism in Pakistani fiction* (Doctoral dissertation, University of the Punjab, Lahore).
- Shafique, F., & Mahmood, K. (2010). The role of educational information systems for survival in information society and the case of Pakistan. *The International Information & Library Review*, 42(3), 164-173.
- Singerman, H. (1999). *Art subjects: Making artists in the American university*. Univ of California Press.
- Smart, R. G. (1966). Subject selection bias in psychological research. *Canadian Psychologist/Psychologie canadienne*, 7(2), 115.

- Spittle, M., & Spittle, S. (2016). Content of curriculum in physical education teacher education: expectations of undergraduate physical education students. *Asia-pacific journal of teacher education, 44*(3), 257-273.
- Spratt, T., & Callan, J. (2004). Parents' views on social work interventions in child welfare cases. *British Journal of Social Work, 34*(2), 199-224.
- Stables, A., & Stables, S. (1995). Gender differences in students' approaches to A-level subject choices and perceptions of A-level subjects: a study of first-year A-level students in a tertiary college. *Educational Research, 37*(1), 39-51.
- Yakavets, N. (2016). Societal culture and the changing role of school principals in the post-Soviet era: The case of Kazakhstan. *Journal of Educational Administration.*