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Ali, Majid

National College of Business and Economics

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Aspects that affect students ' satisfaction with higher education quality management in Pakistan

Dr. Majid Ali
Independent Scholar

Abstract This study is an attempt to analyze the factors which affect students' satisfaction in Higher Education in Pakistan. For this purpose, the sample size of 500 students related to the higher education was taken into consideration and was provided with the questionnaires. The responses obtained from the students were analyzed through SPSS. Furthermore, 10 teachers were also included in the sample size from which interviews were taken to accomplish the aim of the paper. The interviews were analyzed using a thematic analysis approach. In this paper literature related to the topic along with the conceptual framework was also highlighted which further enhanced the understanding of the topic. The findings of the paper concluded that educational policies, online system, appropriate teachers and classroom atmosphere are the major factors which impact the students' satisfaction in higher education in Pakistan. Moreover the communication and quality of services like the library can also enhance the level of satisfaction.

Keywords: quality teachers, effective communication, student's satisfaction

Introduction

Student satisfaction has been treated with high regard and is often embedded in foundation universities and colleges and all other institutions. The student formulates the crux of the success within an educational institution. The need to ensure students remain satisfied with facilities, quality of management, and educational policies to allow the institution to successfully operate within the educational market. Driving its foundation from a number of aspects such as those of the quality of teaching staff, educational policies and etc. A largely satisfied student line within institutions quality and policies has been highlighted as the most stringent element which can result in the success of an educational institute as against those which are to compete against them. Yusoff et al. (2015) have highlighted the fact that the need to ensure higher levels of satisfaction amongst the students can be regarded with respect to its significance in appraising the standards at which the institution resides. The dependence of rising student satisfaction can be considered with respect to a number of factors that are spread across the whole higher education genre which has been considered in the article to follow. The development of effective student satisfaction remains dependent on the higher education institutions and the number of facilities which they provide to students.

The number of students enrolled in higher education in Pakistan is nearly 3 million this constitutes nearly 161 universities and approximately 1064 colleges in the country (Daily

Times, 2018). The number is subjected to an increase of 10% each year. Thus the need to ascertain the factors that impact higher education student satisfaction. The consideration of various factors shall be carried out and data shall be gathered from both students and teachers to ensure a better ascertaining of findings within the study to follow, using SPSS and thematic analysis to review findings from the data.

Literature review

In their research Ognjanovic et al. (2016) highlighted the fact that the need to ensure that students remain satisfied is quite important for higher educational institutes. This considered important and further is dependent on a variety of factors that can help harness student satisfaction. The researchers were of the opinion that the choice of courses is considered to be one of the most pivotal aspects or factors that can impact student satisfaction within higher education. Krucay and Inan (2017) have added to the above-mentioned eminence of student satisfaction with additional factors that can impact it. Learning environment being created and effective fostering of such environment within higher education institutes are quite necessary. Satisfied students help garner success for the institute as it is pivotal within the modern day competition which they face as more and more universities are inaugurated.

The idea of quality adhered to product cannot be extended to the services industry. This is because while goods have physical cues for inferring quality, quality in services is underpinned by “experience” and “credence” factors. In addition, because services are performance-oriented, intangible, heterogeneous and inseparable, it is challenging to measure quality. This is because while goods have physical cues for inferring quality, quality in services is underpinned by “experience” and “credence” factors. In addition, because services are performance-oriented, intangible, heterogeneous and inseparable, it is challenging to measure quality. While products have the necessary physical indicators for quality inferiority, the performance of facilities is based on criteria knowledge and relevance. Furthermore, as facilities are quality oriented, immaterial, diverse and inextricable, performance measurement is a challenge. In addition, it is not always simple to provide all clients the same value. Researchers believe that quality of services the most important skill even for higher education organization in terms of survival, efficiency and development. Authors also show that attraction to learners has more impact, more knowledge of future and more competitive.

Usually, the performance of the product is general client or other participant appraisal of the service, i.e. it is suitable for purpose when meeting/exceeding standards. This is an assessment or stance concerning a service’s general or supremacy. Put simply, the presumed standard of service is an general assessment of a service’s excellence or badness. Top quality of delivery helps to maintain current clients and generate fresh clients not only because of favorable suggestions for other participants, for example potential learners, workers, caretakers, promoters and authorities. That means that universities working in a dynamic setting must think how elevated-quality services can be delivered to satisfy participants’ requirements. Institutional guidance from students on the performance of their overall learning knowledge is an environment where universities worldwide are increasingly active.

Author	Factors Identified
Tsedzah and Obuobisa-Darko (2015)	More lecture halls, lecturer-student relationship, better sanitation
Butt and Ur Rehman (2010)	Courses offered, lecturer expertise, facilities, and opportunities for learning (environment)
Weerasinghe and Fernando (2018)	University image, academic staff, programs and facilities offered
Arif et al. (2017)	Web-based services (off-campus students), courses, courses offered, facilities provided,
Kyriakides (2018)	Educational policies
Fagbohunka (2017)	infrastructures
Aht Tan (2017)	Quality assurance

Quality Staff and Teachers

According to Bakre et al. (2018), the impact which teacher and their traits have on student satisfaction in higher education is quite important. It has been considered that the staff quality and practices to teaching deem either a positive or negative impact on student satisfaction within the institute. Thus eminent consideration should be provided and due care is taken while selecting teachers for higher education students. Rashid and Asghar (2016) have additionally highlighted the teacher training and development to utilize technology and adhere to it within the classroom is considered to be quite important as it helps garner better student satisfaction and learning environment to be marinating within the classroom. The larger proportion of students who are familiar to technology are considered to be impacted with the use of technology and thus are satisfied to a larger extent with the staff quality and teachers ability to connect with it. Asrar-ul-haq et al. (2017) were of the opinion that quality staff and satisfied teachers were quite important in deriving satisfaction amongst students. The impact which it has on students' satisfaction enables it to be listed within the most important factors which can impact students' satisfaction within higher education.

Lab and Library Services

In their research, Douglas et al. (2015) opined that while several other factors could result in satisfied students. An institution with an equipped library and labs can have an upper hand over those that do not. The need to ensure that students remain satisfied and have a larger inclination towards a particular institute the observation of the lab and library services is quite integral. Abidin (2015) has highlighted the fact that quality education is considered important for higher education student satisfaction. The quality, however, depends on several areas which can impact the students' satisfaction. Lab and library facilities which are provided by an institution formulate a large proportion of the relevant factors that impact higher education student satisfaction. Students in higher education are often involved in studies within the institute only, thus library services are integral for satisfaction. The research by Andrews et al. (2016) has highlighted the fact that spaces and services of the library have an integral impact on student satisfaction. The need to ensure that the use of the greater and more structured libraries services is important in the structuring of student satisfaction for an institute in higher education. Murray et al. (2016) have highlighted the fact that the use of the greater and more structured libraries and the relevant

services such as trained developed librarians and better addition learning environment being enabled within libraries is considered to be one of the most important aspects of student satisfaction in higher education.

Communication and Services

In line with research by Kirmizi (2015) it can be ascertained that the use of better communication predicts better student satisfaction. As with respect to internal communication and that which is with online platforms in the university. The level of satisfaction is observed to be increased at quite a large extent which helps the students and management of such institutions to be in smoother communication. The need to ensure that students remain satisfied is quite inclined towards the ability of the institute to establish communication with them. Thus highlighting its eminence in doing so. It has been highlighted by Imlawi et al. (2015) that the need to ensure better satisfaction levels within a higher education institute and all relevant enrolled students are based on communication. It is considered in the study that with personal; communication being important the further eminence which web communication has been considered to deem results in institutes and other higher education relevant genres of management must enable web-based communication to ensure students satisfaction is appraised by far. It has been highlighted by Englund *et al.* (2017) that it is important that teachers witness the impotence of technology and communication within higher education. This recognition at the hands of teachers shall be quite an important aspect that helps students learn in a better manner and be the case for higher student satisfaction.

Classroom Arrangement

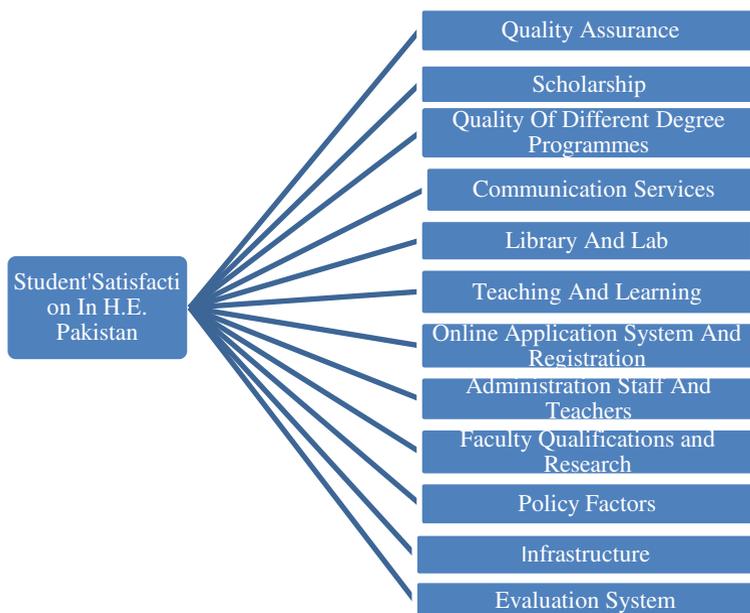
It has been provided for by Han et al. (2018) that while other intrinsic measures of student satisfaction have been considered it is important that more intimate relationship between student and the classrooms be considered in order to analyze the level of satisfaction which can be derived. The design and layout and the prevalent atmosphere within the classroom help harness higher students satisfaction when in accordance with that of the student perception of the good classroom. Thus it is quite an impacting aspect within an organization that in order to ensure a better environment for learning based on the classroom aura and environment. Nanclares and Rodriguez (2016) have highlighted important findings with respect to not just arrangement but the designing of the classroom within higher education setting where students witness a larger and more stringent impact in terms of satisfaction in case of better designing of the classroom. The design of a modern day classroom has been considered to ensure a sense of serenity and thus help the learning and development of students in higher education. Moreover, it is important to consider that the age group of the higher education students must be understood prior to the designing of classrooms and arranging them in order to have the largest impact on the student satisfaction. The need to develop a better understanding of the classroom arrangement within higher education is considered to be quite an understanding factor for student satisfaction within higher education.

Educational Policies

The policies and practices affecting students are those aspects of a institution's operation that organize students' experiences within the institution. For students, these policies and practices also structure the parents' relationship with the institution. In considering the educational policies and practices affecting students. The decisions that a school makes regarding established policies and practices affect students enormously. The policies and practices in both classrooms and in the entire institution provide the context for student' satisfaction.

Conceptual Framework

The conceptual framework presented below has been considered to increase the impact which is to be students during the course of the study. The designed conceptual framework highlights very stringently developed relationships between the dependent and the independent variables of the study. The independent variables deduced for the study in the conceptual framework are inclusive of the quality staff and teachers, lab and library services, communication and services classroom arrangement, and educational policies. The dependent variable for the study includes Student Satisfaction in Higher education in Pakistan. The mentioned variables which are the independent ones are considered to be the factors affecting student satisfaction.



An important area within the conceptual framework is considered to be where the relation between two most prominent factors is concerned however the relevant branches that stem out of the independent variables of factors affecting students satisfaction have been elaborated upon in the literature review above where details have been deduced from previously conducted studies which help deem support for this impact on the research topic.

Author	Impacting factor
Biollinger and Waslik (2009)	Most important is communication regardless of either distance learning or on-campus learning
Kim et al. (2011)	The adherence of the staff to modern day educational tools and the quality of teaching
Ming (2010)	Choices in courses and the facilities provided on campus help students satisfaction ease out decision making.
Joo et al. (2011)	The relevance of the classroom atmosphere to the learning environment which sought after.
Malik (20110)	Service Quality on Students' Satisfaction in Higher Education Institutes

Methodology

The primary objective of the study is to consider the factors that constitute students satisfaction Pakistan higher education.

Research design

Thematic analysis has been considered to highlight the findings from the interviews. The division into relevant themes helped isolate findings for each variable and thus help develop and identify a connection between each of them to help devise conclusions. Considering the deductive approach for the study has helped the development of the qualitative and quantitative research data of the study and to be effectively utilized. The research philosophy within the study has been considered to be positivism. This has helped test the relevant factors and existing theory for student satisfaction in higher education.

Sampling

Students from higher education have been considered to be the sample for the study, and interviews have been conducted from teachers within the field. 500 students were selected for the questionnaire of which the response rate was 100% and 10 teachers were part of the interviews. Responses from the questionnaire were analyzed using the Statistical Package for Social Sciences (SPSS) to ensure that the responses are provided in a more easily interpretable way.

The questionnaire content was purposefully tested in light with literature and aligned to ensure that the context matched the areas of previous studies with the literature review. This was effectively done to ensure that the questionnaire remained within boundaries of the research topic. With the interviews, the ability to ensure a semi-structured aspect was

enabled in order to help broaden the realm of responses that could be obtained from the interviewees. The interview questions were rechecked for errors and the same was continued with questionnaire survey statements to enable perfection and thus relevant changes were made with each detection until the final one was developed.

Table 1 Participants' basic information

	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	297	59.4	59.4	59.4
	Female	203	40.6	40.6	100
Class	Graduate	297	59.4	59.4	59.4
	Postgraduate	203	40.6	40.6	100
	Total	500	100.0	100.0	

The data has been collected from the students of both the genders and both have participated in the survey. The majority of the responses has been collected from the male students as 297 male students have responded which is 59.4% of the total respondents. However, female students have also participated in the survey as the above table depicts that 203 females have responded to the survey which is 40.6% of the total population.

The education class of the respondents has also been asked on which it has been found that among all the respondents 297 participants were graduate which is 59.4% of the total population. However, 40.6% of the respondents were the post graduated. However, there was no participant that was undergraduate.

Model

The following model is estimated in this study

$$SS_t = B_0 + B_1QA_t + B_2SP_t + B_3FQR_t + B_4AD_t + B_5OL_t + B_6ES_t + B_7IS_t + B_8EP_t + B_9LL_t + e_t$$

- | | |
|---------|-------------------------------------|
| Factors | Explanation |
| QA | Quality Assurance |
| SP | Scholarship |
| FQR | Qualification and Research |
| AD | Administration (Teaching and Staff) |
| OL | Online Registration |
| ES | Evaluation System |
| IS | Infrastructure |
| EP | Education Policy Factor |
| LL | Library and Lab |

Findings

Statistical test

Reliability

Reliability analysis is used to determine the consistency of the collected data. It evaluates whether the data is reliable to get a consistent result.

Table 2: Case Processing Summary

Cases	N	%
Valid	500	100.0
Excluded*	0	0
Total	500	500

List wise deletion based on all variables in the procedure

Source: Author' Calculation

The above table shows that the total number of observation is 500 from which the data has been gathered. The above-mentioned table represents that all the respondents have participated in the survey and the reliability of 500 observations has been calculated.

Table 3: Reliability Statistics

Cronbach's Alpha	N of items
0.748	44

Source: Author' Calculation

The reliability statistics can be evaluated by using Cronbach's alpha as shown in the table above. The reliability test for the gathered data is found to be 0.748 which represents that the reliability of 44 numbers of items is 74.8%. This means that data is reliable and it will give a consistent result.

Regression

The regression test is analyzed to identify whether the model to evaluate the result is a good fit and the results for the study are significant. This analysis includes three different tests that will help to find the impact of one variable on another.

Table 4: Model Summary

Model	R	Adjusted R Square	S.E
1	0.615*	0.419	0.627

a. QA, SP, FQR, AD, OL, ES, IS, EP

Source: Author' Calculation

The model summary is used to evaluate the impact of an independent variable on the dependent variable. The value of R is used to identify the relationship between the variables. However, the test shows that there is 61.5% relationship between independent variables and dependent variables. On the other hand, R square is used to evaluate the impact of the independent variables on dependent variables. It can be observed from the table that the value of R square is found to be 0.419 which means that there is a 41.9% impact of independent variables on student satisfaction. It is the moderate impact of the factors that are affecting student satisfaction. The remaining 62.7% are the other factors that could influence the satisfaction level of students.

Table 5: ANOVA TEST^b

Model	Sum of Squares	df	Mean Square	f	sig
Regression	79.414	4	23.416	6.731	0.000 ^a
Residual	183.194	495	0.430		
Total	262.608	499			

a. Predictors: (Constant), QA, SP, FQR, AD, OL, ES, IS, EP
b. Dependent Variable: SS

Source: Author' Calculation

ANOVA is used to identify whether the regression model is fit to predict the result or not. The above-mentioned table shows that the significance value of the regression model is found to be 0.000 which indicates the regression model is fit and it will give consistent results.

Table 6: COEFFICIENTS^A

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
C	0.361	0.151		3.181	0.001
QA	0.270	0.048	0.218	6.135	0.000
SP	0.037	0.038	0.041	0.512	0.014
FQR	0.651	0.139	0.513	9.418	0.000
AD	0.061	0.041	0.315	3.514	0.000
OL	1.034	0.241	1.289	3.814	0.000
ES	0.517	0.475	0.637	0.710	0.016
IS	0.026	0.038	0.041	0.491	0.000
EP	1.592	0.728	1.392	2.821	0.003
LL	0.061	0.582	0.084	1.934	0.592

a: Dependent Variable SS

Source: Author' Calculation

The coefficient table is used to evaluate the significance level of the variables. The above-mentioned table represents that the significance level of all the factors except lab and library is found to be 0.000 which is less than the threshold of 0.05. This means that the results for these two variables are significant as they fall under the critical region. On the other hand, the services of library and lab do not impact student satisfaction as the value p-value shows that insignificant value of 0.592 which did not meet the threshold. Thus, it can be stated that there is an influence of qualified staffs and teachers, communication and interaction and classroom arrangement on student's satisfaction.

Correlation

Correlation analysis helps to identify the relationship between the variables. The relationship between quality staffs and teachers and student satisfaction is found to be moderate. However, the relationship between student satisfaction and communication and interaction is found to be the strong relationship between the variables. Classroom arrangement also has a moderate association with student satisfaction. Moreover, the services of the lab and library are less associated with student satisfaction because it shows the weak.

Table 7: Correlation

		QA	SP	FQR	AD	OL	ES	IS	EP	LL
QA	PC	1	0.209*	0.372*	0.273**	0.136**	0.479**	0.413*	0.238**	0.333**
	Sig		0.013	0.017	0.000	0.000	0.000	0.025	0.000	0.000
	N	500	500	500	500	500	500	500	500	500
SP	PC	0.479**	1	0.327**	0.413*	0.109*	0.116**	0.479**	0.273**	0.109*
	Sig	0.000		0.000	0.025	0.016	0.009	0.000	0.000	0.014
	N	500	500	500	500	500	500	500	500	500
FQR	PC	0.108*	0.136**	1	0.333**	0.116*	0.333**	0.312**	0.726**	0.101*
	Sig	0.016	0.000		0.000	0.009	0.000	0.000	0.000	0.025
	N	500	500	500	500	500	500	500	500	500
AD	PC	0.109*	0.327**	0.479**	1	0.108*	0.726**	0.238**	0.333**	0.108*
	Sig	0.016	0.000	0.000		0.016	0.000	0.000	0.000	0.016
	N	500	500	500	500	500	500	500	500	500
OL	PC	0.238**	0.109*	0.109*	0.246**	1	0.137*	0.176**	0.209*	0.543**
	Sig	0.000	0.014	0.014	0.000		0.025	0.009	0.016	0.000
	N	500	500	500	500	500	500	500	500	500
ES	PC	0.109*	0.101*	0.372*	0.726**	0.278**	1	0.479**	0.443**	
	Sig	0.016	0.025	0.031	0.000	0.000		0.000	0.000	
	N	500	500	500	500	500	500	500	500	500
IS	PC	0.333**	0.1112*	0.333**	0.273**	0.112*	0.273**	1	0.312**	0.116*
	Sig	0.000	0.012	0.000	0.000	0.012	0.000		0.000	0.009
	N	500	500	500	500	500	500	500	500	500
EP	PC	0.294	0.272*	0.278**	0.101*	0.327**	0.327**	0.116**	1	0.479**
	Sig	0.025	0.034	0.000	0.025	0.000	0.000	0.009		0.000
	N	500	500	500	500	500	500	500	500	500
LL	PC	0.643**	0.109*	0.136**	0.271**	0.109*	0.238**	0.137*	0.108*	1
	Sig	0.000	0.014	0.000	0.000	0.014	0.000	0.025	0.016	
	N	500	500	500	500	500	500	500	500	500
PC Pearson Coefficient										
** Correlation is significant and the 0.01 level (2tailed)										
** Correlation is significant and the 0.05 level (2tailed)										

Source: Author' Calculation

Interview analysis

In order to evaluate the student satisfaction from a teacher's perspective, interviews have been conducted from 10 teachers of the universities of Pakistan. The interview questions include 5 questions that have been asked from each of the respondents. The first question that has been asked to the teachers is the qualities that students expect from them. 6 out of 10 respondents have responded that the students focus more on credibility and passion from the teachers. They want the presence of teachers in the class on time. The passion and dedication of the teachers can be seen from the teaching style which varies from teacher to teacher. However, most passionate teachers can make the student satisfied through their attention and dedication. Remaining 4 participants have responded that students expect teachers to be corporative with kind personality who can build a relationship with the student. This helps the student to easily communicate and interact with teachers.

Another question that has been asked by the teachers was about the teaching method that they prefer the most to increase student participation. There were 4 teachers that have responded that they engage the students by providing classroom assignments and case studies to the students and divide the class into different groups. This helps the students to provide their input in the class by solving the short problem within a group. 3 of the teachers have responded that they use the question-answer approach in the classroom and allow the student to answer the questions asked by the teachers. These teachers believe that

it helps in assessing the students and also increase their learning. However, the remaining three teachers have responded that encourage the students to come in front of the entire class and summarize the learning from the lectures. This develops confidence in the students motivates them in taking participation in the class.

The teachers were also asked about the satisfaction level of students from their teaching methods. It has been found that there all the respondents believe that the teaching style of the teachers makes them satisfied as it encourages them to take part in the class and increase their learning. The reason that has been given for the satisfaction of students is that they evaluate the students on the basis of their learning and concept as they are provided different problem questions to solve it. This does not only increase participation but also enhance the learning of the students.

The question has been asked from the teacher that do they think their teaching method is fulfilling the HEC requirement. 7 out of 10 has responded that their teaching method is meeting the HEC standards as the teaching method focuses on the learning outcome by providing knowledge that is not only limited to the syllabus but they also share their experiences to the students which increase their learning. On the other hand, 3 teachers have responded that they are meeting the requirement of HEC as the teachers do not only provide lectures but they also provide the assignment to implement the knowledge provided by the teachers.

The teachers were also asked about the suggestion for the improvement in the institutions of Pakistan. It has been found from the interview that the institutes have the lecturers that are qualified as MS or Mphil and less percentage of Ph.D. staffs. However, the quality of education can be improved if the institutions will increase the Ph.D. staffs in their institutions because they are highly qualified and can provide quality of education to the students. Thus, 4 of the teachers have recommended increasing the Ph.D. faculties in the institutions of Pakistan. It is also important to hire the experienced teachers in the Universities as 3 out of 10 teachers have suggested increasing the experienced staffs in the educational institutions as it will improve the quality of teaching. They have also recommended that management should also use the communication channel for the students and teachers that will help them to enhance their learning because this will develop the interest of the student to resolve their queries by communicating with the teachers. Moreover, 3 of the respondents has suggested that the institutions should use advanced technology in the classroom such as auto attendance and lecture sharing through technology to save time in the classroom.

CONCLUSION

The study and the collected data during its course have been considered to highlight prominent findings with respect to data in relation to student's satisfaction in higher education. This has been considered to be dependent on four factors which are provided within the conceptual framework of the study. The study witnesses an observation with respect to the fact that students when studying in a higher education institution are bound to develop a strong impact of the surrounding which is the classroom and also the most important player within it is the teacher. This is important and can be conclusively

highlighted that the hiring of appropriate teachers and the designing of the classroom atmosphere is quite necessary in order to ensure that the students witness the deemed satisfaction within the classroom. In this regard, an addition may be made while concluding that the use of the communication and quality of services such as the lab and library is considered to make an impact on the satisfaction which the students have in relation to the higher education institute. The amount of satisfaction has been considered to be impacted by the development of communication and other services such as those that are inclusive of the lab and library services.

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AUTHOR INFORMATION

