

The Prediction of the Responsible Determinants to Institutional Attributes for EFL Student Dropout at the Tertiary Level¹

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Abstract

Many of the first-year undergraduate students who enrol in universities, particularly in top-ranked private universities in Bangladesh, struggle with getting good grades. As a result, many students look forward to a bleak future, dropping out midway through their studies. Thus, improving the rates of graduation and reducing the rates of attrition is extremely important at the tertiary level in Bangladesh. The predominant determinants (whether personal or family related) that predict the institutional causes of student attrition before graduation need consideration and investigation. In order to investigate the strongest predictor from the above mentioned determinants, a survey questionnaire (with a five-Likert scale) was designed and applied to 390 EFL students who were pursuing their degrees in four disciplines at a university in Dhaka, Bangladesh. The current study employed multiple regression analyses and found that family related determinant causes not only closely correlated with institutional determinant attributes, but contributed the most in predicting student dropout rates. The results of the current study will have further implications for researchers, educational administrators, and policy makers at the tertiary level.

Resumen

Muchos estudiantes del primer año de pregrado en universidades, particularmente en universidades privadas de primer nivel en Bangladesh, luchan por obtener buenas calificaciones. Como resultado, muchos estudiantes abrazan un futuro sombrío, abandonando sus estudios a mitad de camino cuando se supone que deben estar modelando su carrera hacia arriba. Por ello, los determinantes predominantes (ya sean atributos personales o atributos relacionados con la familia) que predicen los atributos institucionales de la deserción de los estudiantes antes de la graduación necesitan consideración e investigación. Con el fin de investigar el predictor más fuerte de los determinantes mencionados, se diseñó y distribuyó un cuestionario de encuesta (con una escala de cinco Likert) entre 390 estudiantes de inglés como lengua extranjera que cursaban estudios principalmente en cuatro disciplinas en una universidad en Dhaka, Bangladesh. El estudio actual empleó análisis de regresión múltiple y encontró que los atributos determinantes relacionados con la familia no solo se correlacionan estrechamente con los atributos determinantes institucionales, sino que son los que más contribuyen a predecir las tasas de abandono de los estudiantes. Los resultados del estudio actual tendrán implicaciones para los investigadores, los administradores del sector de la gestión educativa y los responsables de la formulación de políticas en el nivel terciario.

Introduction

University student dropout rates are not only a growing concern in many industrialized countries, namely the USA, the UK, and Australia (Hernandez-Martinez, 2016), but they have also become a pivotal concern for educators in developing countries, and recently, have drawn the crucial attention of researchers. Student attrition at the tertiary level, whether in developed or developing countries, carries manifold social, economic, and psychological costs. One example of the concerns related to student attrition is the negative economic repercussions. In other words, there will be a shortage of well-prepared graduates, and the shortage will have a negative impact on the economy of these countries.

Student attrition negatively affect individuals as well as the society through the loss of tax revenues and social welfare benefits (Bowers, 2017; Breslow, 2012). According to Petrick (2014), when a student drops out of school, he or she reduces his or her chance of being economically independent and becomes psychologically hopeless. He also adds that there exists a gap between job opportunities and qualified candidates, and the gap has grown substantially over the past several decades. When students fail to graduate from universities, the nation is at risk of having an unskilled and uneducated population which will

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be a burden to their families and society (Bowers, 2017). The economic and social expense to society because of students' dropping out of universities is so enormous that education leaders cannot ignore it. Bowers (2017) and Breslow (2012) state that the dropout problem negatively affects both the person and society in general. The negative effect of dropping out of university is life-long. For example, today's university dropouts are more likely to have lower income than their peers who graduate from universities. In a shrinking economy, when university dropouts search for work, they are more likely not to find long-term jobs and acceptable wages to assure a decent livelihood.

This scenario comes to the fore when students choose to pursue business-oriented and engineering-oriented courses and careers at the tertiary level in developing countries, like Bangladesh. The students who graduate in these fields play a crucial role in entrepreneurship, innovation, and economic growth of a country. In addition, other pitfalls also deserve attention, i.e., student dropout rates, students' risky unemployment status, and low salaries. Against this backdrop, it is significant to investigate into student attrition at the tertiary level in Bangladesh.

Moreover, many of the first-year students who pursue their studies in universities, especially in top-ranked private universities in Bangladesh, experience difficulties with themselves in getting good grades; thus, many of them become university drop-out, leaving their bright future. Whether considering or perceiving English or mathematics at the tertiary level as "too hard" or "too different" by the students is one of the most predominant determinants of students' dropping out or whether there are some other causes, the problem has caught the attention of researchers (Bowers, 2017; Hernandez-Martinez, 2016; McDermott et al., 2019). Students abandon their studies at the tertiary level for many reasons: personal, family-related, or institutional. However, very little is known about the correlation of personal and family-related attributes to institutional attributes as determinants for student attrition at the tertiary level. Thus, this research paper aimed to investigate further the correlation and prediction of personal and family related determinant attributes to institutional determinant attributes in determining student dropout rates at the tertiary level in Bangladesh.

Theoretical Background

Why students drop out

Research on dropout rates has encompassed the reasons students provide for leaving their schools and other factors that predict student attrition at the family, community, individual, and community levels (McDermott et al., 2019). Demographic characteristics are associated with school abandonment. Students who come from a low-income background, and who are part of a racial and ethnic minority, have higher chances of not completing their studies (McFarland et al., 2016). Many factors associated with school abandonment include academic behaviours (suspensions and expulsions, low attendance, non-completion of homework), academic performance (low test scores, course failure(s), grade retention), and attitudes about academics (a lack of engagement, a non-realization of the importance of attending school, low aspirations and expectations). The above mentioned factors are all associated with student dropout rates (Hammond et al., 2007).

Students might not realize the importance of graduation and might have been held back or not be engaged or interested in schoolwork (Fine & Zane, 1991). The capability of teachers and the supportive environment of the school are also linked to student attrition (Christle et al., 2007). When the students perceive positive relations between teachers and students, they are less likely to drop out of school. Family factors that are correlated with student attrition included financial constraints of family, parental engagement with the school, their expectations from schooling, and happenstances (i.e., death of a parent, abuse, homelessness, and change of residence) that take place within the family (Fine & Zane, 1991). Less parental engagement in a student's education is also associated with school abandonment (Rumberger et al., 1990). Family financial constraints are also associated with school attrition. These occur when the students need to work to support their families or take care of their younger siblings (Fine & Zane, 1991).

With regard to the reasons for student attrition discussed so far, we realize that dropping out of university is not a spontaneous and isolated decision; instead, it is a gradual process which starts with a child's preschool years (Bowers, 2017). The study of Henry et al. (2011) investigated the role of parental

investment in school as a predictor variable of high school completion and found a negative relationship between educational expectations and socio-economic level. According to Balfanz and Legters (2004), there is a close relationship between school environment and dropout rates. Furthermore, the lack of a good relationship with peers also correlates with student attrition (Hymel et al., 1996).

Personal attributes, family related attributes and institutional attributes

Students' personal determinant attributes are also responsible for their attrition from universities. Kuh et al. (2008) and Saccaro and França (2020) mention that student characteristics, such as for example, their lack of involvement in academic activities, is instrumental in dropping out. These two studies also add that a student's academic ability can be responsible for their attrition from universities. Students who have lower grades have a higher probability of dropping out.

Saccaro and França (2020) suggest students drop out of universities because of family issues and work that hinder their school commitment. They also add that the students who are the first in their families to enrol in universities are more likely to drop out than students whose parents have a higher education degree. They also add that students who come from higher-income families have less probability of dropping out of universities.

Scholarships and credit programmes play a significant role in decreasing the rates of attrition for students who enrol in undergraduate programmes in universities (Chen & Hossler, 2017; Saccaro & França, 2020; Santelices et al., 2016). Thus, a lack of this kind of institutional programs contributes to student attrition at the tertiary level.

Research gap

Brown and Park (2002) state that generally, economic factors are predominantly correlated with student dropout rates. Gao et al. (2019) report that academic performance is the most consistent and the strongest predictor of attrition from school. The results of their study demonstrated that including the role of peer relations on attrition, both pull factors (factors external to school) and push factors (adverse experiences within school) were strongly correlated with dropping out. In addition, their study showed that peer factors were closely correlated with school abandonment.

The results of a study of Parviainen et al. (2020) showed that students who came under symptomatic profiles (classes of students who have psychological ill-being) were more likely to drop out compared with those with normative profiles (classes of students who have psychological well-being). Taking children's perspectives, Mughal et al. (2019) found that a range of push factors (i.e., school related factors) and pull factors (i.e., family and household dynamics) and sometimes the combination of both were responsible for student abandonment. McDermott et al. (2019) investigated students who dropped out of high school and found that the reason for their leaving was associated with school engagement and environment. In other words, the school environment and engagement led to boredom, failing course(s), not realizing the importance of attending school, and lack of interest in school attendance.

Astorne-Figari and Speer (2018) conducted a study that investigated whether gender had any effect on abandoning university studies; and the results demonstrated that compared to women, men were more likely to drop out from a university. As relates to elementary level school students, Hughes et al. (2017) investigated the effect of grade retention on students' quitting school and found that compared with students' promotion to higher classes, students' retention in the same classes led to a higher dropout rate. The study of Hernandez-Martinez (2016) demonstrated that university practices were also responsible for students' attrition from universities. Van Houtte and Demanet (2016) investigated teachers' belief about students and the students' intention to drop out and found that especially in vocational education, teachers' beliefs about whether the students could learn, affected students' staying in school.

Several studies (Rashid et al., 2015; Sabates et al., 2013; Sarker et al., 2019) have been conducted on student dropout rates in the Bangladeshi context. Rashid et al. (2015) investigated the elements that attracted the students to enrol in the Diploma in Computer Science Application (DCSA) programme and what pushed them to drop out of the programme. Their study showed that the push factors that prompted students to drop out were predominantly institutional or extrinsic related attributes. The study of Sarker et

al. (2019) focussed on the economic effect on students' attrition. This study revealed no relation between student attrition and economic development. Also, they found that other factors were responsible for student attrition, such as parents' unwillingness, chronic poverty, geographical location, and security problems for girls. The study of Sabates et al. (2013) revealed that gender, age, and financial constraints were the significant predictors of student attrition. From the above discussion, we can observe that there are few studies that have investigated the correlation and prediction of personal and family-related attributes to institutional attributes for student attrition at the tertiary level.

Dropout theories

According to Hernandez-Martinez (2016), most research that deals with student attrition are quantitative and seek to explain and describe different factors that are closely related with abandonment at different phases of formal education. Generally, the factors mentioned can be classified into three categories as: (a) school (i.e., academic preparedness), (b) social (financial support, such as loans and grants), and (c) family (relations and poverty). Besides, in discussing theories, Hernandez-Martinez (2016) has added that researchers have proposed several theories explaining the dropout phenomenon. Out of the influential theories, two are most dominant: Finn's (1989, 1993, 2006) "participation-identification" model and Tinto's (1975, 1993, 2002) "integration" model.

Furthermore, the majority of the theories that concern attrition, encompassing both Finn's and Tinto's models, have a basis on the more general concept of "engagement" to conceptualize the dropout process. According to Rumberger (1987), dropping out is seen as a disengagement process from school, and is due to academic or social reasons. The current research work treats both Finn's and Tinto's theories as seminal, and their proposed theories represent most of the general ideas that are closely connected with the dropout literature. The two theories have been expanded and improved; thus, they encompass most of the ideas illustrated in dropout literature.

In terms of Finn's model, it can be observed that attrition results from the lower level of school participation and identification. His model suggests that an adolescent might be in danger of school failure irrespective of his or her status characteristics, i.e., home language, ethnicity/race or family income, if he or she is not an active participant in school and class (Finn, 1993). Furthermore, the model views that a student who fails to form a sense of "belonging" (identification) without engaging in school activities (participation) will probably withdraw and drop out at any point of time during their school or university attendance. Furthermore, the emphasis of Finn's model is on the role of students who decide their engagement or disengagement from school life is due to any reason whatsoever.

On the other hand, Tinto's model was developed on the basis of Durkheim's theory of suicide. Generally, when individuals are not adequately integrated into the fabric of society, individuals commit suicide. His model argues that the dropout process from college can be viewed as a longitudinal process of interactions between the social and academic systems of the college and the individual. Additionally, during college, a person's experiences in the mentioned systems continuously modify his institutional commitments and goals in ways that lead to different forms of withdrawal or persistence (Tinto, 1993). Hence, according to the model, it is the interplay between the student's commitment to the institution and his commitment to the goal of college completion which specifies whether or not he or she decides to drop out of college. The central point of Tinto's model is that a student who perceives that he or she does not 'fit in' (integration) will have lower levels of commitment and will probably disengage and drop out.

Furthermore, both the models provided by Finn and Tinto consider student attrition as the probable result of a long process of disengagement, which may begin early at school and end up in the students' withdrawal from education. Probable early signs that a student is disengaging from education include absence from classes or undisciplined behaviour. However, this is not the case all the time. Studies (Janosz et al., 2008) that included topics like school engagement have discovered that some students who show high levels of school engagement still end up dropping out of school.

Research Questions of the Study

Based on the above discussion, the mentioned objective at the end of the introductory part of this research work, and the research gap in the literature, the following research questions were formulated.

1. As relates to student attrition, to what level are the personal and family-related determinant attributes related to institutional determinant attributes?
2. To what degree do personal and family-related determinant attributes contribute to predicting institutional determinant attributes? Which is the strongest predictor of institutional determinant attributes?
3. To what level do personal and family-related determinant attributes affect institutional determinant attributes for student attrition?

Methodology

Participants

A total of 390 English as a foreign language (EFL) students participated in the present study. They were in their first year of undergraduate-level study from a top-ranked private university in Bangladesh. According to Dörnyei (2007), the rule of thumb establishes that the minimum sample size should be around 100 respondents for a survey design. On the other hand, Bartlett et al. (2001) argue that for a population of 600 with a 0.01 alpha level and a 3% margin of error, the sample size should be at least 155. Since the sample size of the current study was 390, it was appropriate and valid for conducting the current study.

Out of 390 students, 268 (68.7%) were male, and 122 (31.3%) were female. They were from four different academic programs, namely Bachelor of Science degrees in Business Administration, Economics, Computer Science, Engineering, and Electrical and Electronic Engineering. Students' average age (mean value) was 20.38 (Standard Deviation = 1.900, range = 17). The student selection criterion was that the chosen students had passed the Intensive English I course. The Intensive English I course is equivalent to about A2-B1 level in correspondence to/ reference with the Common European Framework of Reference. English was a foreign language for the participants, and the students had been studying English for 12.5 years. The students' participation in the survey design was voluntary and with the understanding that their information would be kept confidential.

Instruments

The researchers employed a survey questionnaire adapted from the questionnaire employed by Bowers (2017). It consisted of three variables; the first one (independent variable) relates personal determinant attributes. The second variable (independent) associates family related determinant attributes, and the third one (dependent variable) concerns institutional determinant attributes for student attrition. Each variable comprised ten items, and the total number of items was thirty. The researchers employed a five-point Likert scale, namely '1 = strongly disagree', '2 = slightly disagree', '3 = neither agree nor disagree', '4 = slightly agree', and '5 = strongly agree' for their study.

One example of the first independent variable, namely personal determinant attributes is "To me, passing the examinations with a good GPA [Grade Point Average] is difficult." Another item of the second independent variable, i.e., family related determinant attributes is "My parents do not value the importance of graduating from a university." In addition, one example of the dependent variable, i.e., institutional variable, is "My university does not help me to get proper and affordable living accommodations." To obtain accurate data, the adapted questionnaire was designed so that the questions would reflect responses as to why the students chose the particular question items of the questionnaire. The format of the survey questionnaire was easily administered and user friendly. Completion of the survey questionnaire took the participants ten minutes or less.

Research design

The current study employed a cross-sectional survey questionnaire under the quantitative research approach. The researchers administered multiple regression analyses, which fell under a survey research design (Creswell, 2014). The study administered multiple regression analyses to examine the probable correlations and predictions related to the variables. The researchers obtained permission from the respective Deans of both schools (Business and Engineering) and conducted the study among the students. The questionnaires were distributed among the students by the researchers and the students were given ten minutes to complete it. Before conducting the study, the researchers explained the purpose of the study

to the students and the parameters of confidentiality. The study was conducted on the premises of the university.

As the primary data analysis, the researchers employed the two-tailed Pearson correlation in the multiple regression analysis for determining the extent of inter-correlations between personal, family, and institutional determinant attributes. In addition, the researchers carried out standard multiple regression analyses (since the data were normally distributed) for determining the powerful predictors of institutional determinant attributes. In other words, the researchers applied force-entry multiple regression (not stepwise) analysis for determining the important role played by personal and family related determinant attributes in explaining institutional determinant attributes for student attrition. SPSS version 24 (Statistical Package for Social Studies) was used for the analyses.

Instruments' validity

The researchers conducted a pilot study/test to determine the reliability and validity of the three instruments. After conducting the pilot study, the researchers collected data for the main study. In addition, the researchers sent the three instruments to three English language-teaching experts with similar backgrounds and asked them to check the appropriateness of the English language in the adapted questionnaire. The researchers took the viewpoints of the experts into consideration and modified the language of the three instruments accordingly. Then the researchers ran the reliability analysis for each measure separately. Concerning the reliability of the three instruments, the Cronbach's alpha coefficients for all the constructs of the three instruments are provided in Table 1.

Variables	No of Items	Cronbach's Alpha
Personal Attributes	10	0.725
Family Related Attributes	10	0.755
Institutional Attributes	10	0.849

Table 1. Cronbach's Alpha Coefficients

As shown in Table 1, for the current study, the Cronbach's alpha coefficients for all the measures of the three instruments were more than the acceptable level of values (i.e., from 0.60 to 0.70) for internal consistency as recommended by Hair et al. (2010). This implies that the items that were adapted were reliable and valid for collecting data for the main study.

Results

Research Question 1: As relates to student attrition, to what level are the personal and family-related determinant attributes related to institutional determinant attributes?

To answer the research question, as the first step, the researchers have presented descriptive and reliability statistics. As a result, Table 2 presents the means and standard deviations of the three attributes of student attrition. In addition, Cronbach's alpha reliability coefficients for the three attributes of student attrition are reported in Table 2. The researchers have presented Cronbach's alpha reliability coefficients in Table 2 to show that as a measure, the three attributes of student attrition have an internal consistency.

Determinants	N	Min.	Max	Mean	Standard Deviation	Reliability
Personal Attributes	390	1.20	4.40	2.7038	.60027	.725
Family Related Attributes	390	1.00	4.80	1.9867	.68467	.755
Institutional Attributes	390	1.00	4.40	2.1010	.74191	.849

Table 2. Scores of mean and standard deviation and values of reliability coefficients (N= 390)

As shown in Table 2, out of the three attributes that are responsible for student attrition, personal determinant attributes had the highest mean scores (2.7038). This means that personal determinant attributes were the most responsible for student attrition. However, institutional determinant attributes had the largest standard deviation (.74191). This represents a reasonable spread in the scores. In addition,

concerning the degree of reliability, institutional determinant attributes had the highest reliability coefficient value (.849).

The second step for the first research question was to investigate the correlations between personal determinant attributes and family related determinant attributes and institutional determinant attributes. To determine the relationship, the researchers applied Pearson product moment correlation. Table 3 shows the result of the correlation.

Determinants	Personal Attributes	Family related attributes	Institutional attributes
Personal attributes	-----		
Family related attributes	.546**	-----	
Institutional attributes	.559**	.605**	-----

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

Table 3. Correlations among personal attributes, family related attributes, and institutional attributes

As shown in Table 3, positive, high, and statistically significant ($p < 0.01$) inter-correlations were found among personal determinant attributes, family related determinant attributes, and institutional determinant attributes. A positive, high and statistically significant correlation was found between family related determinant attributes and institutional determinant attributes at the level of 0.01 ($r = .605$; $p = .000$). This suggests that for student attrition, both family related determinant attributes and institutional determinant attributes were equally responsible for the dropout of the students. The positive, high, and statistically significant correlation between family related determinant attributes and institutional determinant attributes was the highest compared with correlation between personal determinant attributes and institutional determinant attributes ($r = .559$; $p = .000$) and correlation between personal determinant attributes and family related determinant attributes ($r = .546$; $p = .000$). From the above analysis, we have obtained a clear answer to the first research question. From the above discussion, we can say that the three determinants were responsible for student attrition. However, family related determinant attributes, as compared to personal determinant attributes, were more closely related with institutional determinant attributes for student attrition.

Research Question 2: To what degree do personal and family-related determinant attributes contribute to predicting institutional determinant attributes? Which is the strongest predictor of institutional determinant attributes?

In order to get an answer for research question 2, the researchers ran multiple regression analyses to identify the unique prediction or contribution of two independent variables (as predictors). In this case, the scores of the responses of institutional determinant attributes were a dependent variable (criterion). Tables 4 and 5 show the results of the multiple regression analyses.

R	R ²	Adjusted R ²	ANOVA			
			df	Mean Square	F	p
.468	.219	.215	2	23.410	54.151	.000

Table 4. Prediction value of all three variables

Under ANOVA table, the 'f' statistics was significant at the level of 0.001 ($R^2 = .219$), $F(2, 387) = 54.151$, $p < .001$; as a result, the run regression model was suitable for data processing. As shown in Table 4, the R value is .219, so we can say that the two independent variables, namely personal determinant attributes and family related determinant attributes jointly accounted for 21.9% of variance in the criterion/dependent variable, i.e., institutional determinant attributes.

IV ¹	Standardized Coefficients	t	sig	Correlations	
	β			Partial	Part

PAD ^a	.249	5.204	.000	.256	.234
FRAD ^b	.319	6.658	.000	.321	.299

IV¹ = Independent Variables; Dependent Variable: Institutional Determinant Attributes; ^aPersonal Determinant Attributes, ^bFamily Related Determinant Attributes

Table 5. Under coefficients, beta and correlations values of all variables

As shown in Table 5, personal determinant attributes accounted for $(.234)^2 = 5.48\%$ of variance in the total institutional determinant attributes score of the responses. On the other hand, family related determinant attributes accounted for $(.299)^2 = 8.94\%$ of variance in the total institutional determinant attributes score of the responses. The result suggests that, of the two variables, family related determinant attributes predicted the most (8.94%) in explaining the institutional determinant attributes for student attrition.

Research Question 3: To what level do personal and family-related determinant attributes affect institutional determinant attributes for student attrition?

As shown in Table 5, under standardized coefficients, family related determinant attributes had the largest beta value ($\beta = .319$; $t = 6.658$, $p = .000$ (significant) ($p < .001$)). On the other hand, personal determinant attributes had a smaller beta value ($\beta = .249$; $t = 5.204$, $p = .000$ (significant) ($p < .001$)) compared with family related determinant attributes. This suggests that family related determinant attributes, in a statistically significant way, affected the most in explaining the outcome or dependent variable, i.e., institutional determinant attributes for student attrition. The other variable, i.e., personal determinant attributes had a statistically significant effect on explaining the institutional determinant attributes too.

Discussion

The result of the present study is not aligned with the study of Henry et al. (2011) since there is a statistically significant correlation between family related determinant attributes and institutional determinant attributes, i.e., a positive correlation between socioeconomic level and educational expectations. Bowers (2017) mention that when parents are actively engaged in the academic activities of their children, the children understand the significance of attending university and the value of education. The personal attitude of the parents towards education plays a very important role in the perception of the children to become a university graduate. When parents themselves are university graduates and realize that becoming a university graduate is important, they will expect high academic achievement from their wards; thus, they will make the children realize the significance of being a university graduate. From this discussion, we can infer that parental investment plays a significant role in the relationship between educational outcomes and socio-economic indicators. Thus, parental investment will help their wards to improve educational outcomes and lessen the percentage of student attrition from universities.

Moreover, Bowers (2017) and Mughal et al. (2019) add that many students feel forced to leave university to work full-time to help their families financially. The students who come from financially compromised families perceive working full time as a necessity. They do not consider the future implications for their lives based on their decision to drop out. They take up the roles which their parents are supposed to take within a family. Many students perceive that the earnings they get by doing a full-time job are better than the benefits of graduating from a university. The findings of the current study support Balfanz and Legters' (2004) findings of a close relationship between school climate and dropout rates. The present study shows that the university environment is pivotal to student attrition. Thus, university environment is also responsible for students' dropping out.

According to Bowers (2017), Gao et al. (2019) and McDermott et al. (2019), the students who come from affluent families tend to have less lower dropout percentages rates than their counterparts from low socioeconomic backgrounds. Sometimes students' decisions to drop out are based on what other students in their peer-groups are doing. For other students, dropping out of the universities is the only way out for providing family financial assistance. Those students who have classes large-sized classrooms are more likely to drop out than students from small classroom sizes. Students who suffer from accommodation problems, do not get proper facilities for study, lose some time when they move and try to settle down.

They face difficulties adjusting academically; they cannot perform well in the semester-wise examination; and as a result, they drop out of universities. School context supports student graduation rates, and this is supported by Bowers and Sprott's (2012) research. This result further substantiates the notion that school climate improvement and making schools welcoming places for all, help students to not drop out of school.

This paper partially supports Tinto's view, which is, the process of student attrition is a corresponding concept between the individual and the prevalent social practices executed by the educational system. In other words, the focus of Tinto's model is on the significance of this association and not merely on the individual's position, as propagated by Finn's model. Indeed, Tinto's (2002) work encompasses the idea of "institutional responsibility" to demonstrate that disengagement not only takes place because of students' failure to integrate but is also the result of the institution's failure to accommodate students from diverse backgrounds. This paper has elaborated on the logical nature of this association. In other words, it can be said that the focus has been on the way learners are able to fashion the circumstances they are in, and by doing so, they change themselves.

Implications

Educators can benefit from the findings of this study to develop new strategies to address the reasons for student attrition. Concerned university authorities can consider the findings of this study to help students understand the life-long consequences of dropping out of universities. Researchers can investigate further into the problem of student attrition, and the investigation would benefit the researchers since the investigation will provide insight into why students continue to abandon universities. Policy makers can take into account the determinants that influence student attrition from universities when developing university reform policies and education legislation. This study would provide new insights into the issues encountered by university students and proffer the stakeholders an avenue to offer solutions to help the students graduate from universities.

When a student fails in one course, he or she is at risk of dropping out of universities or schools. At that time, he or she can be accommodated in the early warning system to prevent them from dropping out of the university. Along with this early warning system, the care and support of teachers can also help students avoid dropping out. This means that a positive, cordial relationship between teachers and students also helps students not to drop out. This study adds to the literature on dropout behaviour of university students since the literature mainly focused on high school students. The findings of the study advance a broader policy debate concerning how to efficiently manage institutional determinant attributes to prevent student attrition from universities.

Limitations

The current study adds new insights into the body of research literature, but it has drawbacks as well. However, the data set is a recent one and draws from students across the whole university. The study was conducted among the students of Business and Engineering schools of a university. This study only represents student views from a particular university; more students from other universities and their views on student attrition determinants can contribute to more comprehensive studies.

References

- Astone-Figari, C., & Speer, J. D. (2018). Drop out, switch majors, or persist? The contrasting gender gaps. *Economics Letters*, 164, 82-85. <https://doi.org/10.1016/j.econlet.2018.01.010>
- Balfanz, R., & Legters, N. (2004). Locating the dropout crisis. Which high schools produce the nation's dropouts? Where are they located? Who attends them? Report 70. *Center for Research on the Education of Students Placed at Risk CRESPAR*. <http://files.eric.ed.gov/fulltext/ED484525.pdf>
- Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.
- Bowers, M.E. (2017). *Why are 21st century students dropping out of high-schools?: An examination of causes, effects, and prevention* (Publication No. 2017-10618513) [Doctoral dissertation, Wingate University]. ProQuest Dissertations Publishing.
- Bowers, A. J., & Sprott, R. (2012). Why tenth graders fail to finish high school: A dropout typology latent class analysis. *Journal of Education for Students Placed at Risk (JESPAR)*, 17(3), 129-148. <https://doi.org/10.1080/108010824669.2012.692071>
- Breslow, J. M. (2012, September 21). *By the numbers: Dropping out of high school*. *Frontline*. <https://www.pbs.org/wgbh/frontline/article/by-the-numbers-dropping-out-of-high-school>
- Brown, P. H., & Park, A. (2002). Education and poverty in rural China. *Economics of Education Review*, 21(6), 523-541. [https://doi.org/10.1016/S0272-7757\(01\)00040-1](https://doi.org/10.1016/S0272-7757(01)00040-1)

- Chen, J., & Hossler, D. (2017). The effects of financial aid on college success of two-year beginning non-traditional students. *Research in Higher Education*, 58, 40-76. <https://doi.org/10.1007/s11162-016-9416-0>
- Christle, C. A., Jolivet, K., & Nelson, C. M. (2007). School characteristics related to high school dropout rates. *Remedial and Special Education*, 28(6), 325-339. <https://doi.org/10.1177/07419325070280060201>
- Creswell, J. W. (2014). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Pearson.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Fine, M., & Zane, N. (1991). Bein' wrapped too tight: When low-income women drop out of high school. *Women's Studies Quarterly*, 19(1/2), 77-99. <https://www.jstor.org/stable/40003358>
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142. <https://doi.org/10.3102%2F00346543059002117>
- Finn, J. D. (1993). *School engagement and students at risk*. National Center for Education Statistics. <https://nces.ed.gov/pubs93/93470a.pdf>
- Finn, J.D. (2006). *The adult lives of at-risks students: The roles of attainment and engagement in high school* (NCES 2006-328). National Centre for Education Statistics. <https://nces.ed.gov/pubs2006/2006328.pdf>
- Gao, S., Yang, M., Wang, X., Min, W., & Rozelle, S. (2019). Peer relations and dropout behavior: Evidence from junior high school students in northwest rural China. *International Journal of Educational Development*, 65, 134-143. <https://doi.org/10.1016/j.ijedudev.2018.04.001>
- Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). *Dropout risk factors and exemplary programs: A Technical Report*. National Dropout Prevention Network. <http://dropoutprevention.org/wp-content/uploads/2015/05/DropoutRiskFactorsandExemplaryProgramsFINAL5-16-07.pdf>
- Henry, K. L., Cavanagh, T. M., & Oetting, E. R. (2011). Perceived parental investment in school as a mediator of the relationship between socio-economic indicators and educational outcomes in rural America. *Journal of Youth and Adolescence*, 40(9), 1164-1177. <https://doi.org/10.1007/s10964-010-9616-4>
- Hernandez-Martinez, P. (2016). "Lost in transition": Alienation and drop out during the transition to mathematically-demanding subjects at university. *International Journal of Educational Research*, 79, 231-239. <https://doi.org/10.1016/j.ijer.2016.02.005>
- Hughes, J. N., Cao, Q., West, S. G., Smith, P. A., & Cerda, C. (2017). Effect of retention in elementary grades on dropping out of school early. *Journal of School Psychology*, 65, 11-27. <https://doi.org/10.1016/j.jsp.2017.06.003>
- Hymel, S., Comfort, C., Schonert-Reichl, K., & McDougall, P. (1996). Academic failure and school dropout: The influence of peers. In J. Juvonen & K. R. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 313-345). Cambridge University Press. <https://doi.org/10.1017/CBO9780511571190.015>
- Janosz, M., Archambault, I., Morizot, J., & Pagani, L. S. (2008). School engagement trajectories and their differential predictive relations to dropout. *Journal of social Issues*, 64(1), 21-40.
- Kuh, G. D., Cruce, Ty. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-563. <https://doi.org/10.1080/00221546.2008.11772116>
- McDermott, E. R., Donlan, A. E., & Zaff, J. F. (2019). Why do students drop out? Turning points and long-term experiences. *The Journal of Educational Research*, 112(2), 270-282. <https://doi.org/10.1080/00220671.2018.1517296>
- McFarland, J., Stark, P., & Cui, J. (2016). Trends in high school dropout and completion rates in the United States: 2013. Compendium Report. [NCES 2016-117]. National Center for Education Statistics. <http://files.eric.ed.gov/fulltext/ED569943.pdf>
- Mughal, A. W., Aldridge, J., & Monaghan, M. (2019). Perspectives of dropped-out children on their dropping out from public secondary schools in rural Pakistan. *International Journal of Educational Development*, 66, 52-61. <https://doi.org/10.1016/j.ijedudev.2019.02.004>
- Parviainen, M., Aunola, K., Torppa, M., Poikkeus, A.-M., & Vasalampi, K. (2020). Symptoms of psychological ill-being and school dropout intentions among upper secondary education students: A person-centered approach. *Learning and Individual Differences*, 80, 1-11. <https://doi.org/10.1016/j.lindif.2020.101853>
- Petrick Jr, D. L. (2014). School drop outs: Poverty and consequences for society. *Insights to a Changing World Journal*, 4, 127-136.
- Rashid, M. M., Jahan, M., Islam, A., & Ratna, M. M. (2015). Student enrollment and dropout: An evaluation study of Diploma in Computer Science and Application Program at Bangladesh Open University. *The International Review of Research in Open and Distributed Learning*, 16(4), 18-32. <https://doi.org/10.19173/irrodl.v16i4.2157>
- Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. *Review of Educational Research*, 57(2), 101-121. <https://doi.org/10.3102/00346543057002101>
- Rumberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L., & Dornbusch, S. M. (1990). Family influences on dropout behavior in one California high school. *Sociology of Education*, 63(4), 283-299. <https://doi.org/10.2307/2112876>
- Sabates, R., Hossain, A., & Lewin, K. M. (2013). School drop out in Bangladesh: Insights using panel data. *International Journal of Educational Development*, 33(3), 225-232. <https://doi.org/10.1016/j.ijedudev.2012.09.007>
- Saccaro, A., & França, M. T. A. (2020). Stop-out and drop-out: The behavior of the first year withdrawal of students of the Brazilian higher education receiving FIES funding. *International Journal of Educational Development*, 77, 1-11. <https://doi.org/10.1016/j.ijedudev.2020.102221>
- Santelices, M. V., Catalán, X., Kruger, D., & Horn, C. (2016). Determinants of persistence and the role of financial aid: Lessons from Chile. *Higher Education*, 71(3), 323-342. <https://doi.org/10.1007/s10734-015-9906-6>
- Sarker, M. N. I., Wu, M., & Hossain, M. A. (2019). Economic effect of school dropout in Bangladesh. *International Journal of Information and Education Technology*, 9(2), 136-142. <https://doi.org/10.18178/ijiet.2019.9.2.1188>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. <https://doi.org/10.3102%2F00346543045001089>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.) The University of Chicago Press.
- Tinto, V. (2002). *Establishing conditions for student success: Lessons learned in the United States*. Address to the 11th Annual Conference of the European Access Network, Prato, Italy.

Van Houtte, M., & Demanet, J. (2016). Teachers' beliefs about students, and the intention of students to drop out of secondary education in Flanders. *Teaching and Teacher Education*, 54, 117-127. <https://doi.org/10.1016/j.tate.2015.12.003>