

**ÇUKUROVA UNIVERSITY
INSTITUTE OF NATURAL AND APPLIED SCIENCE**

MSc. THESIS

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**DETERMINANTS OF PRIMARY SCHOOL DROPOUT IN
SOMALILAND**

DEPARTMENT OF STATISTICS

ADANA, 2019

**ÇUKUROVA UNIVERSITY
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ÖZ

YÜKSEK LİSANS TEZİ

SOMALİLİLAND’DA İLKOKUL TERKİN BELİRLEYİCİ FAKTÖRLERİ

Muhyadin Aden ABDİLLAHI

ÇUKUROVA ÜNİVERSİTESİ
FEN BİLİMLERİ ENSTİTÜSÜ
İSTATİSTİK ANABİLİM DALI

Danışman : Doç. Dr. Deniz ÜNAL
Yıl : 2019, Pages: 65
Jüri : Doç. Dr. Deniz ÜNAL
: Prof. Dr. Ali İhsan GENÇ
: Prof.Dr. Nazif ÇALIŞ

Bu çalışma, 2013 Somaliland Hane Halkı Anketi (SHA) verilerini kullanılarak ve lojistik model analizi kullanılarak Somaliland'daki ilköğretim terkinin sosyoekonomik belirleyicilerini incelemeyi amaçlamaktadır. Amaç, hanehalkı ve bireysel özellikler olarak sınıflandırılan ilköğretim okulu bırakmanın sosyoekonomik belirleyicilerini ve öğrencilerin okulu bırakma üzerindeki etkisini ve ilköğretim seviyesindeki öğrencilerin okulu bırakmayı azaltmak için olası herhangi bir politika ikamesini araştırmaktır. İlköğretim okulu terkinin farklı lojistik regresyonları şu boyutlara göre projelendirildi: kırsal ve kentsel. Model tahmin edildikten sonra, her model için marjinal etkiler gözlemlenmiştir. Sonuçlar, evli bir çift aileden, yüksek gelirli hanelerden ve eğitimli ebeveynleri olan öğrencilerin okullara alındığını göstermiştir. Olasılık oranları tüm modellerde negatiftir, bu da okulu bırakan bir çocuğun daha düşük olasılığını gösterir. Bununla birlikte, hanehalkı büyüklüğü, ilköğretime uzaklık ve öğrenci cinsiyeti, çocuğun okula bırakma olasılığını artırmakta, bu nedenle, ücretsiz Evrensel İlköğretim'in (ÜEİ) ilköğretim erişilebilirliği ve okulların azaltılması üzerindeki içgörülerini göstermektedir. Son olarak, bu çalışma hükümet için ilköğretim erişilebilirliğini artırmasını ve okul müdürleri tarafından alınan okul ücretlerini yakından takip etmesini önermektedir, çünkü bu durum özellikle yoksul ailelerden ve kırsal bölgelerdeki okulları bırakma sayısını artırma ihtimali vardır. Hükümet, ülkesinde kendi kendine eğitim programları başlatmalı ve tüm ilköğretim okullarına ve meslek okullarına zorunlu ücretsiz ilköğretim eğitimi vermelidir; Bunun nedeni, ilköğretim okullarının öğrenim ücretini ödeyemeyen öğrencilerin eğitimlerine devam etmeleri beklenilmesidir. Sonuç olarak, bu şekilde verimsiz aile bireylerinin sayısı azalır.

Anahtar kelimeler: İlköğretim eğitimi, okuldan ayrılma, lojistik model, Anket verileri.

ABSTRACT
MASTER THESIS
DETERMINANTS OF PRIMARY SCHOOL DROPOUT IN SOMALILAND

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Supervisor : Doç. Dr. Deniz ÜNAL
Year : 2019, Pages: 65
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This study intends to scrutinize the socioeconomic determinants of primary school dropout in Somaliland by employing logistic model analysis using the 2013 Somaliland Household Survey (SHS) data. The goal was to explore the socioeconomic determinants of primary education dropout categorized as household and individual characteristics that influence the dropout of students and any possible policy substitutes to reduce dropout of students at the primary school level. Different logistic regressions of dropout of primary school were projected, taking the following dimensions: rural and urban. After the model was estimated, marginal effects were observed for each model. The results showed that pupils from a married couple family, higher income households and with educated parents were enrolled in schools. Their odds ratios are negative across all models, indicating a reduced likelihood of a child dropping out of school. However, household size, distance to primary school, and pupil gender increase the odds ratio that the child will drop out of school, therefore signifying the insightful effect of free Universal Primary Education (UPE) on both the accessibility of primary schools and the reduction of dropouts. Finally, this study recommends for government to improve the accessibility of primary schools and maintain close supervision on school fees taken by school principals, since this has the prospect of increasing the number of dropouts, especially children from poor families and in rural areas, to unsustainable levels. Initiate self-educating programs in country wise; and impose compulsory free primary education to all primary schools and vocational schools; this is because pupils who are unable to pay the tuition fee of primary schools are highly expected to continue their education. Consequently, in this way the number of unproductive family members is reduced.

Keywords: Primary education, dropout, logistic model, marginal effect.

GENİŞLETİLMİŞ ÖZET

Bir kalkınma ajanı olarak eğitim, insana toplam özgürlüğü getirdiği için, dünyanın bütün ulusları tarafından değerlidir. İnsanı cehalet ve sefaletten bilgi ve mutluluğa dönüştürdü. İnsanı kendine, nesline ve ötesine faydalı kıldı. Eğitim, uygun bir ortam sağlayarak, bireye yeni bilgi, tutum ve beceriler kazandırarak, bireye kendisi ve toplumu için yararlı olmasını sağlayacak, bireye fiziksel, zihinsel, ahlaki, ruhsal ve duygusal olarak gelişiminde yardımcı olur. Eğitim , bu seviyede iyi bir temel atılırsa, eğitim merdivenini akademik kazanımın doruğuna tırmanması için öğrencinin ayaklarını güçlendirir. Somaliland Cumhuriyeti ESSP (2017), ilköğretimin ilköğretim okullarında 6-13 yaş arası çocuklara verilen eğitime atıfta bulunduğunu belirtir. İlköğretim eğitim düzeyi, eğitim sisteminin geri kalanı üzerine kurulu olduğu için tüm sistemin başarısının veya başarısızlığının anahtarıdır. Bu ifade, ilköğretim eğitim seviyesinin diğer seviyelerin başarısı için en önemli olduğu gerçeğini, dolayısıyla paydaşların sürdürülebilirlecek sağlam bir temel oluşturmak için mümkün olan her şeyi yapma ihtiyacını doğrulamaktadır. İlköğretimin eğitim sisteminin temeli olabilmesi için, diğer seviyelere ilerledikçe öğrencilere temel ve genel bilim bilgilerini, bilimsel objeleri ve araçları kullanmalarını ve çalışmalarını öğretmek, ilerletecekleri bu temel bilgilerle konuşabilmelerini öğretmek getirmeleri gerektiğini savunur.

Somaliland, ilkokulda okuyan dünyanın en düşük ilkokul çağındaki çocuklarından birine sahiptir. Hem birincil hem de ikincil seviyeler için NER, her iki seviyede önemli derecede GER'den oldukça düşüktür. Birincil net kayıt oranı (NER) ulusal olarak% 17 iken, ortaokul NER sadece% 9'dur. Bununla birlikte, GER'de olduğu gibi, bu rakamlar eğilim verilerinin mevcut olduğu tüm eyaletlerde önceki yıllardan hafif bir iyileşme göstermektedir. Birincil net kayıt oranı (NER) iyileştirme oranları Somaliland'daki mevcut seviyelerine göre yüzde 5 ila 7 arasında değişmekte (% 35), ikincil NER iyileştirme oranları ise Somaliland'daki

mevcut seviyelere göre yüzde 9,5 ila 23 arasında değişmektedir (% 10,4). Fakat, bu marjinal kazançlar, coğrafi sınırlar, geçim sınırları ve uzak mesafeden dolayı erişilemeyen bölgelerde sosyal olarak dışlanmış gruplar için aşırı eşitsizlikleri de gizlemektedir (UNICEF, 2018).

Okul bırakma, herhangi bir ülkenin ilköğretiminin temel sorunudur ve Somaliland, ilköğretim okulu terk oranlarının yüksek olduğu ülkeler arasındadır. Somaliland ilköğretim okulu terk oranları 6-13 yaşları arasındaki öğrencilerin% 24.65 olduğu tahmin edilmektedir. UNFPA'dan (2013) yapılan son ulusal anket verileri, ilköğretime kayıtlı çocukların% 50'sinin yaşının üzerinde olduğunu göstermiştir. Günümüzde okulu terk etmenin neden olduğu sorun küresel olarak daha düşük seviyelere indirgenmiş ancak halen devam etmektedir.

Bu nedenle, bu çalışma, Somaliland'daki Merkezi İstatistik Bölümü tarafından toplanan verileri kullanarak 2013 Somaliland Hane Halkı Anketi (SHS) verilerine göre 1.725 hanenin Dünya Bankası ile uyumlu bir şekilde, Somaliland'daki ilkokuldan ayrılma belirleyicilerini vurguladığını sürdürmektedir. Bu çalışma, ilköğretimin okuldan ayrılma belirleyicilerinin ülke genelinden incelenmesi avantajına sahiptir. Ancak, göçebe nüfus hariç. Dahası, daha önce bu kadar büyüklükte bir örnek ile yapılan bir çalışma bulunmamaktadır.

Sonuçlar, birlikte yaşayan ebeveynleri olan çocuğun, ayrı bir aileye sahip olan aynı yaştaki çocukla karşılaştırıldığında okulu bırakma olasılığının daha düşük olduğunu göstermiştir. Böylece, ailenin beraberliği, bir öğrencinin orta okula devam etme olasılığını arttırmaktadır ve % 1 alfa değerinde önemlidir. Gelir düzeyi yüksek bir aileden gelen öğrencilerin, yoksul ailelerin çocuklarına kıyasla okuldan ayrılma olasılığı daha düşüktür ve bunun nedeni yoksul ailelerin öğrencileri okul ücretlerini ödeyememeleridir. Ayrıca, öğrencilerin okulu bırakma baskısı, yaşları arttıkça, özellikle zamanlarının fırsat maliyeti arttığında, daha fakir kökenli çocuklar için artmaktadır. Gelir, % 1 alfa değerinde istatistiksel olarak anlamlıdır. Ayrıca, öğrencilerini eğiten ebeveynler okulu bırakma olasılığı daha düşüktür ve

çocuğun okulu terk etmemesinin sebebinin, ebeveynlerin eğitime ilişkin olumlu algı olduğuna inanılmaktadır. Ne yazık ki, % 10 alfa değerinde istatistiksel olarak anlamlı değildir. Buna ek olarak, eğitimli ebeveynlerin hane halkı kaynaklarının tahsis etme kabiliyetine sahip olmaların yanı sıra çocuklarını eğitmek için güçlü bir iradeye sahip olmaları beklenmektedir. Bu faktörlerin bir sonucu olarak, eğer ebeveynlerin eğitimi hem kız hem de erkek çocukların eğitimi üzerinde daha büyük bir etkiye sahipse, kadın eğitiminde kamu yatırımları için başka bir gerekçe olacaktır: bu tür yatırımların nesiller arası etkileri eğitimde ve nihayetinde gelecekteki kazançlarda cinsiyet farkını büyük ölçüde azaltacaktır.

Ancak, ilkokulun mesafesi uzak bir ilkokula giden bir öğrencinin okuldan ayrılma olasılığının daha yüksek olduğunu ve % 1 alfa değerinde önemli olduğunu göstermektedir. Hane büyüklüğü değişkeninin pozitif katsayı değeri, büyük bir aile özelliğine sahip olan birincil kayıtlı çocuğun okulu bırakma olasılığının daha yüksek olduğunu, ancak geleneksel alfa seviyelerinde % 1, % 5 ve % 10'da anlamlı olmadığını göstermektedir. Küçük çocuklar çok uzaklara seyahat edemezler ve ebeveynler çocuklarını okula göndermeye yeterli ulaşım sistemi olmadığı durumlarda daha az isteklidirler. Düşük katılım oranındaki ve okulu terk oranlarındaki bir diğer faktör, kırsal alanlardaki okulların eksikliği ve bu okullardan uzak mesafelerdir. Çocuğun cinsiyeti, özellikle erkek öğrenci olmak, ilköğretimi bitirmeden önce okulu bırakma olasılığı daha düşüktür. Bu, erkek çocuklarını okula göndermeyi tercih eden ve üniversite eğitime kadar çalışmalarına devam etmeleri için onları denetleyen ebeveynlerin algısıdır ve % 1 alfa değerinde önemlidir. Somaliland'da kadınların erkeklerden daha az okul eğitimi alması yaygındır ve ekonomik ve sosyal-kültürel nedenlerden dolayı kadınların daha erken bırakma veya daha önce askıya alınma olasılıkları yüksektir. Oldukça erken evlenen kırsal alanlardaki kız çocuklarının okula kaydolmasının fırsat maliyetinin yüksek olduğu iddia edilmektedir, çünkü okullaşma avantajları ebeveynlerinin hane halkına kadar artmayacaktır. Son olarak, hükümet doğurganlık

oranın düşürmek için aile planlaması yöntemlerini kullanmalıdır ve bu şekilde aile büyüklüğü daha küçük olacaktır ve bu da öğrencinin tüm eğitim seviyelerini geçme şansını artırır.

Hükümet, son olarak farkındalık eğitimi programları oluşturmakta veya kız çocuklara fakir hanelerden okula devam etmeleri için okullar ve teşvikler vermektedir. Medeni durum, öğrencinin okulunu ilerletmesinin ana nedeni olarak düşünülüyor Diğer taraftan, bu, ebeveynleri boşanmış veya ayrı olan öğrencilerin okulu bırakma olasılığının daha yüksek olduğu anlamına gelir. Bu nedenle, bu çocukların bakıma alınması ve onlara bakım barınaklarına verilmesi gerekir.Uzun mesafeler küçük çocuklar tarafından kat edilemezdi ve ebeveynler çocuklarını okula göndermeye yeterli ulaşım sistemi yokluğunda dolayı daha az isteklidirler. Uzun mesafeler kat edilemezdi ve ebeveynler çocuklarını okula göndermeye yeterli ulaşım sistemi yokluğunda daha az isteklidirler. Düşük katılım oranındaki ve okulu terk oranlarındaki bir diğer faktör, kırsal alanlardaki okulların eksikliği ve bu okullardan uzak mesafelerdir. Okul otobüsleri sanayileşmiş ülkelerde yaygındır ve bu nedenle okul mesafesi genellikle okuldan ayrılma ihtimalinin yüksek bir faktörü değildir, ancak Somaliland'ın kırsal bölgelerinde böyle bir otobüs sistemi yoktur. Aynı şekilde, hükümet, öğrencileri okula götürmek ve okuldan almak için şehirlerde otobüs temin etmemektedir ve Özel otobüs kiralamaaları şehirlerarası işletmeyi pahalı ve ulaşılmaz hale getirmektedir. Bu nedenle, bu durum, yoksul hanelerin olumsuz etkilerden dolayı öğrenciler okulu bırakmaktadır. Özellikle öğrencilerin okula ortalama 4 km gittiği kırsal alanlarda, hükümet daha fazla okul inşa etmelidir.

EXTENDED ABSTRACT

Education as an agent of growth is appreciated by all countries of the globe because it has brought human beings' complete freedom. It has converted man into understanding and happiness from ignorance and poverty. It has produced man, his generation and beyond, beneficial to himself. Education enables individuals grow physically, mentally, morally, spiritually, and emotionally by offering an appropriate atmosphere, teaching fresh understanding, attitudes, and abilities to individuals that will allow individuals to be helpful to themselves and their community. Education at this stage strengthens the student's feet if a strong basis is set to climb the instructional ladder to the zenith of academic achievement. The Republic of Somaliland ESSP (2017) states that main schooling relates to schooling provided to kids aged 6 to 13 plus in main schools and that main level is the key to the system's achievement or failure as the remainder of the education system is based on it. This declaration confirms the fact that the primary education level is most critical to other levels' achievement. This is the need for stakeholders to do all they can to lay a strong basis for their sustainability. In order to be the basis of the education scheme, primary education holds that it must bring basic and general knowledge of science to the learners through learning. In order to be familiar with such basic information as they progress to other stages.

Somaliland has one of the smallest ratios of primary school kids in the world. The NER is significantly smaller at both main and secondary rates than the similar GER at both rates. The NER is significantly smaller at both main and secondary rates than the similar GER at both rates. The main

NER is 17% nationally, while the secondary NER is only 9% nationally. However, as with GER, in all countries where, trend information is accessible, these numbers show slight improvements over past years. The primary NER enhancement rates vary from 5% to 7% in Somaliland (35%), while the secondary NER enhancement rates range from 9.5% to 23% in Somaliland to 10.4% in Somaliland. These marginal benefits, however, also mask severe inequalities for socially excluded communities along geographical lines, lines of living and in fields that are inaccessible owing to distance from college (UNIC). These marginal benefits, however, also mask severe inequities for socially excluded communities along geographical lines, lines of living, and in fields that are inaccessible owing to distance from college (UNICEF, 2018).

Dropout is the main issue of any country's primary education, and Somaliland is one of the nations with dropout rates for high school. Therefore, this study highlighted comprehensive determinants of primary school dropout in Somaliland using data from the 2013 Somaliland Household Survey (SHS) data collected by Somaliland's Central Statistics Department in conjunction with the Worldbank of 1,725 families. This research has the advantage of examining countrywide drop-out determinants of primary education; however, nomadic populations are excluded. Furthermore, there are no previous studies ever carried out with such a larger sample size.

Results showed that child marriages in college year are more probable to drop out compared to the same unmarried age kid, so early marriage reduces a pupil's likelihood of going up to secondary college and is important in all aspects. Pupils from a greater revenue family are less probable to drop out

of college compared to kids from bad households, and this is because they are unable to pay college charges for students from bad households. In addition, the pressure on students to leave college increases, particularly for kids from poorer backgrounds, as their age increases, particularly as the opportunity cost of their time increases. At 1 percent alpha value, income is statistically important. In addition, students with trained relatives are less likely to drop out, and a child's reason not to drop out is thought to be the favorable perception of the education of the parents. Fortunately, at 1% alpha value, it is statistically important. Additionally, trained parents should have powerful willingness to educate their kids as well as the capacity to deliberately allocate family funds for this purpose. Because of these variables, if parental education had a higher effect on the education of both women and boys, there would be another rationale for public investment in female education: the impacts of such investments on the intergenerational level would significantly decrease the gender gap in education and ultimately in future income.

However, the distance of the primary school shows that a pupil going to a faraway primary school is more likely to drop out from school and it is statistically significant. The positive value of coefficient of household size variable indicates that the primary enrolled child who is from a large family size is more likely to dropout, and it significant at conventional alpha levels 1%. Young children cannot travel far away and parents are less willing to send their children to school in the absence of an adequate transportation system. Another factor in low attendance rates and higher dropout rates is the lack of schools in rural areas and large distances from such schools. Sex of the child, particularly being a female pupil is more likely to leave before finishing primary schooling in comparison to male

child, this is because the perception of the parents that prefer to send their male children to school and supervise them to continue their studies until university level and it is significant at 1% alpha value. It is common in Somaliland that women obtain less schooling than men, and for economic and social-cultural reasons women are more likely to drop out, or be suspended earlier. The opportunity cost of enrolling female children to school in rural areas, where girls are married pretty early is argued to be high as their schooling advantages will not build up to their parental household.

Finally, government should introduce family planning methods to lower the fertility rate and in this way the family size would be smaller which increases the chance of a pupil to pass all the levels of schooling.

The government raises any valuable awareness programs of education or to give schools and inducements for the female pupils from poor households to progress schooling.

Early marriage was also found to be the main problem of pupil school progression. Conversely, this means pupils that marry early have higher probability of dropping out in comparison to the pupil that does not marry during primary school ages. Therefore, these children need to be cared and given them to caring shelters.

Long distances could not be travelled by young children and parents are less willing to send their children to school in the absence of an adequate transportation system. Another factor in low attendance rates and higher dropout rates is the lack of schools in rural areas and large distances from such schools. School busses are familiar in industrialized countries and therefore school distance is usually not a factor in higher dropout, but in rural areas of Somaliland there is no such busing system. Likewise, the government does not provide buses in urban areas to take pupils to and from school, and private hires make urban commuting expensive and out of reach for a number of poorer households with negative drop-

out effects. Especially in rural areas where the pupils travel long distance to school, the government should build more schools.



ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my supervisor Assoc. Dr. Deniz ÜNAL for her guidance and steadfast support throughout the writing of the project and finally together we made it successful. I am grateful to all members of staff in the department of Statistics in Çukurova University of Adana for taking me through the course. I am also grateful to the director of Central Statistics Department in Somaliland and the entire staff for their unwavering support. Special thanks go to my loving parents specially my mother for her parental encouragement and nurturing me in my early basic education. My heartfelt gratitude to my dear wife Hinda Abdillahi, my beloved sisters Muna Aden and Fatxiya Aden for their continued moral, material support, understanding and

prayers during my studies. Above all, I am thankful to our Almighty God for giving me health and wisdom to undertake this study.

May Allah bless you all.



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LIST OF ACRONYMS

UN	: United Nations
NER	: Net Enrolment Ratio
UNDP	: United Nations Development Program
NDPII	: National Development Planning Two
UNICEF	: United Nations Children Fund
UNESCO	: United Nations Education, Science and Cultural Organization
SMDGS	: Somaliland Millennium Development Goals
SHS	: Somaliland Household Survey
GER	: Gross Enrolment Rate
ABE	: Accelerated Basic Education
IQS	: Integrated Quranic Schools
SLEMIS	: Somaliland Education Management Information System
SMDGS	: Somaliland Millennium Development Goals
MEDPR	: Ministry of Education Department of Planning and Research
MOEHE	: Ministry of Education and Higher Education
MOEYS	: Ministry of Education, Youth and Sport
ILO	: International Labour Organization
MICS	: Multiple Indicator Cluster Survey
NGO	: Non-governmental organizations
US	: United States
NWFP	: North-West Frontier Province



1. INTRODUCTION

1.1. Background of the Study

Schooling is the primary source of knowledge acquisition and human development by providing values, skills, way of life, and habits. It is also a basic need for human progress, survival of the society and economic development (Sharma, 2007). The UN and Child Rights Universal Declaration of Human Rights and successive big change summits UN, 1948; 1989; UNICEF, 1990 established the right to education. Governments are responsible to make primary schooling obligatory and free, regarding to Article 28 of the meeting, although Somaliland government offers free primary schooling, but it is not mandatory. Schooling has been acknowledged not only provide people to a joyful life with dignity, but also the suppression of poverty and analphabetism (Wils et al., 2005). As a result of this identification, Somaliland administration and global agencies of development have decided to make quality of education as a universal goal. 100 years ago, basic schooling for the people, which was a perfect model, became the standard in industrialized countries. Significant progress has been made to achieve universal primary education goal since 2000. In 2015, 91 percent of students in developing nations enrolled in primary education, and nearly half has dropped the worldwide number of out - of-school children (UNICEF, 2018). Literacy rates have also increased significantly and more girls were enrolled in primary schools than ever before. All of these achievements are remarkable. Progress has also been difficult and developing regions experienced armed conflicts and high levels of poverty other emergencies. The existence of armed conflict in some places of North Africa and Western Asia increased children dropped out of school. This has been seen disturbing movement. In 1990, 52 percent up to 78 percent in 2012, the greatest primary school enrollment progress has been made by Sub-Saharan Africa in all developing regions; remains huge disproportions (UNDP, 2018).

On the other hand, due to the dropouts of higher figures from school, the right to education and the right to children have been under serious threat, making school progress difficult to sustain for past several years (Wils et al., 2006). In addition, the rate of dropout from school continues to rise. Very few children finish primary school or graduate from high school in most developing countries.

As with any country in Africa, education growth in Somaliland can be tracked to traditional pre-colonial teaching, Western-style in the course of post-colonial, contemporary schooling. As pointed out before the colonial era by Bennars et al. (1996) and Morah (2000), traditional Islamic schooling is provided by Koranic schools that created the development of religious studies, Sharia and law, Arabic sentence structure and Arabic writing. In these schools, it is referred that Arabic as Koran' language, had been the language of instruction. However, in colonial times, the introduction of Western teaching style surpassed over Arabic language. Although Koranic schools are still seen a crucial element of community learning and culture. In fact, traditional Koranic schools were recognized the only institutions of education those remained after the destruction of civil war crisis (Elmi, 1993), (Bennars et al., 1996) and (Morah, 2000).

Consequently, initiatives such as school feeding programs made by Somaliland are instrumental in facilitating school attendance for children from extremely low socio-economic backgrounds. Somaliland's government targeted closely supervising schools, in addition close to underserved population areas, and targeted cash transfers counteracting the cost of student learning supplies to address additional socio-economic exclusion measures. In the primary education system, school facilities have a major effect on gender fairness and physical disability access. One of the key provisions for allowing girls to stay in schools is the availability of water (drinking, especially washing) and latrines. Conversely, 46 % of Somaliland's primary schools, including IQS centers, have access to water and even less 32.9 % to school NDPII (2017). More attention was given during the NDPII to modifying school infrastructure that allows disabled access (ramps).

In Somaliland, a civil war that interacts with the poverty growth cycle in 1994 added great complexity and affected the educational demand and supply. Recent initiatives of education have focused on building successful strategic plan for education that responds to conditions changing rapidly and the needs of the growing society. Net enrolment ratio in Somaliland has risen from 29% in 2001 to 44% in reports (SMDGS, 2012). The ratio increased further by 2011 to 51.3 percent (MICS, 2011). The labor survey conducted by the ILO in 2012 reported an additional 3% increase and a ratio of 54% (ILO, 2012). There is a disparity between regions with the highest Awdal ratio of 65.2% and Togdher and Sool with the lowest ratio of just over 45%. There is also such disparity between urban people 64.9 percent and rural people 45.5 percent (MICS, 2011). In addition, the dropout rate in Somaliland's primary school is overwhelming, leaving or failing to finish at about 62 percent (Muhiyadin and Tanko., 2018).

According to UNICEF and UNESCO (2011), in literature dropouts of school are referred to children who once enrolled in school, but after sometime abandoned school before finishing primary school education. Leaving school has been blamed for different factors that can be categorized as follows; education for parents, employment for parents, income, location of school, sex, marital status, and family size. This study highlighted the combination of these factors as they can be inferred to explore who is more likely of dropping out accurately. Moreover, when multiple risk factors are involved in prediction, the accuracy of dropout predictions increases. Hammond, Linton, Smink, and Drew's (2007) study suggested that child dropping out; often multi-category factors are mentioned. Complex interactions between possible factors lead to a drop out.

This study therefore highlighted comprehensive determinants of primary school dropout in Somaliland using data collected by the Central Statistics Department in Somaliland in concert with Worldbank of 1,725 households from the 2013 Somaliland Household Survey (SHS) data. This study has the benefit of examining determinants of dropout of primary education from a countrywide;

however, nomadic population is excluded. In addition, there are no previous studies with such a larger sample size carried out ever before.

1.2. Profile of the Education Sector of Somaliland

There are four main levels in the Somaliland education system: pre-primary, primary / alternative, secondary / vocational and higher education (see Table 1). Pre-primary (early childhood) is (yet) not fully integrated into formal education, but it exists for up to three years in some private facilities and systems of Quranic School. Eight-year primary schooling is divided into a four-year primary or lower primary cycle and an intermediate or upper primary cycle of four years. Secondary and vocational training (as designed) will also take four years to complete. The exception is the intermediate Arabic schools, which have nine years of intermediate primary education and secondary education of three years. For both systems, the tertiary level has at least two years, with many running for four. In the relevant tables below, each sub-sector is described and evaluated in detail.

Table 1.1. Primary Education in 2003 to 2006 and 2011

Years of School	2003 / 04	2004 / 05	2005 / 06	2011 / 12
Sum of student enrolment (incl. Alternative basic and integrated Qu'ranic schools)	106,480	114,573	131,279	191,567
Of which girls	33.7%	34.1%	35.9%	81,872
Sum of students in private schools	29,417	30,876	18,614	40,463
Of which girls	40.4%	42.5%	55.6%	18,914
Number of schools Public, private, abeandiqs	385	430	516	967 registered schools) Census forms 907
Of which private schools	81	70	58	161 registered 96 private schools
Sum of students in lower primary(from all school categories) as a percent of the total primary students	74.0%	72.6%	73.6%	67%
Schools took school leaving exam (schools with grade 1-8)	57	62	75	223
Students took school leaving exam schools with grade (1-8)	3,742	3,766	4,480	12, 526 (grade of 8)
Students passed school leaving exam	3,313	3,126	3,717	Empty
Total teachers (public and private schools)	2,589	2,843	3,518	6,143

Source: (MOEHE, 2012)

Table 1.2. Primary Education Distributions and Ratios

2005 to 2006		2011 to 2012
Gross enrollment rate total	38.6	44.6%. if projected figures of schools that did not return census forms is included GER is about 46%
Gross enrollment rate female	31.1	38.16%
Gross enrollment rate male	46.1	50%
pupil/teacher ratio	37.3	1 ratio 31
Pupil-qualified/certified teacher ratio		Qualified: 61 ratio 1; certified; 64 ratio1
student/classroom ratio	38.6	Data not available; some schools did not complete this data accurately: the SL EMIS software also has no query section analyzing this part of the data.
percentage of teachers female	11.9	980 teachers: 16%
percentage of teachers with secondary education or above	87.5	Not surveyed
percentage of teachers with teacher training diploma	19.9	Formal primary;1682 and ABE and IQS: 32 Total1714/6143 =28%
percentage students paying fees over \$1 per month	62.6	Public schools N/A Free For private schools 21.1%

Source: (MOEHE, 2012)

1.3. Research Problem

Public and private schools provide us opportunity to learn, work with others and acquire skill. In 1988, civil war broke out and destroyed all the public institutions in Somalia including primary, secondary, vocational schools and universities. In addition, the war has uprooted the whole of Somalia's education and social system, although Somaliland has taken constructive steps by restoring stability and improving schooling. This is primarily due to the concession policy demonstration among clan leaders, resulting in the fairly stable, de facto

independent state of Somaliland. Moreover, this enabled education and other development sectors to function as early as 1992. Rehabilitation and the development of education in Somaliland have been played an important role by the Local and international NGOs.

In operation, 159 primary schools with more than 27,000 students reported an earlier extensive survey carried out by the Somaliland government (MOEYS, 1996). The survey also discovered that only 17% of primary-age children, 23% of boys and 12% of girls aged 6-14 included these schools. 27% was registered in urban areas, which was significantly higher than in rural areas of 16% and along with nomadic pastoral peoples at 1%. In Somaliland, 171 working primary schools enrolled in roughly 46,000 pupils, according to the most recent surveys (UNICEF, 2000). In fact, many findings indicated that the 1987/88 annual rate of enrollment surpassed the level of pre-war of 34,300 children (UNICEF, 1997a). 1,167 teachers were surveyed which made student-to-teacher ratio (STR) of Somaliland at about 31:1. It was reported that this was attained principally by combining local and community efforts with international development agencies by (MEDPR, 2000).

On the other hand, studies showed that students, who enrolled primary school without taking pre-primary schooling, especially at first grade, have a higher frequency of repeating and dropping out at primary level. The higher the pre-primary enrolment ratio of an African country, the higher its rate of completion of primary school and the lower the rate of repetition of primary school (Mingat and Jaramillo, 2008). Arnold (2004) found that lower dropout and repetition rates, early childhood care impact and education are higher for pupils from deprived households than those for more gainful pupils. Pre-school education was one of the Education for All (EFA) objectives and the first objective.

Moreover, another study investigated the factors influencing female student's dropout rate in secondary schools in Mogadishu Mohamoud (2011), but that study examined factors like poverty, domestic labor, parental attitude towards education and it was excluded factors like household size, school location, and

parent's education. This study employed more factors like household size, school location, age, and education of the parents and covered whole Somaliland except nomadic population.

1.4. General Objectives

The aim of this research is generally to explore primary school dropout determinants in Somaliland using logistic regression to improve the internal efficiency of primary schools in Somaliland. Socioeconomic factors were characterized by, parent's education, income, sex, marital status and average household size. In particular, the study determined and described the effect of household size, parent's education, sex, income, age and marital status on the primary school dropout.

1.5. Specific Objectives

Objectives of the study are as following:

- Determine the relationship between parent's education and school attainment,
- Establish the effect of household size on primary school dropout of the child,
- Find out the effect of marital status on primary school dropout of the child
- Explore how gender disparity affect primary school dropout of the child,
- Find out the effect of household income on primary school dropout of the child,
- Describe how school location affects the primary school dropout of the child.

1.6. Research Questions

The study scrutinizes the answers of the following questions

What is the relationship between parent's education and school attainment?

- How does the household size affect primary school dropout of the child?
- How does the marital status affect primary school dropout of the child?
- How does gender disparity affect primary school dropout of the child?
- To what extent does the household income affect primary school dropout of the child?
- To what extent does the school location (distance) affect primary school dropout of the child?

1.7. Significance of the Study

This study has been intended to help and enable the policy-making authorities to persistently and consistently follow the trend of the students through their education system. Ministry of education does not have the capacity to safeguard the internal efficiency of both public and primary schools due to the limited annually allocated budget to run effectively and efficiently its task. This study will contribute information that will be useful for improving the framework of future educational and development policies aimed at reducing primary school dropout rate and uplifting primary school retention of the children in Somaliland.

The findings and the recommendations of the study will also be helpful for school principals in managing effectively and promoting the internal efficiency of their schools. Plus, subjective professional judgment, work experiences, or fashion or on custom in their quality of managing tasks, principals still need to support their techniques, judgment and dealings on real comprehension of issues of schooling by findings of research. The study will also improve internal efficiency of the school and create excellent and friendly education centers. It is hoped that this study should add knowledge to the existing literature; it should generate new ideas for the better and more efficient management for both government of Somaliland and the rest of the world.

1.8. Scope of the Study

This study used secondary data collected from 1,725 households of the all regions in Somaliland by Ministry of National Planning and Development. As an integral part of ministry's mandate, the survey involved conducting capacity development training for managerial and enumerator staff who collected the data that contributed the quality of the data. This study focused on the determinants of primary school dropout. It was also conducted between Sept 2018 and May 2019 through analyzing and reforming the variables in the data in a way that is relevant to the purpose of the study. This research specifically sought to examine how primary school dropout is affected by household size, age, sex, income, education of the parents and location of the child.

1.9. Organization of the Study

The next chapters were organized as follows. Chapter two reviews the relevant literature, both theoretical and empirical on determinants of primary school dropout. The third chapter explains the methods and procedures used in the study to answer the research questions. A theoretical framework is specified followed by an empirical framework. The data used in the study are described. In chapter four empirical results have been discussed. Conclusion and recommendations have been also presented in Chapter 5.

2. PREVIOUS STUDIES

2.1. Introduction

This chapter discusses the related relevant works on the concept of school dropout and the impact of household size; number of household members, parental education, income, gender, age, marital status and whether child dropped out lives urban or rural. In addition, attempts have also made to explore the existing literature gaps and to give a comprehensive overview of both the research questions and school dropout definitions commensurate with review studies that were already available in literature. Furthermore, this chapter reviews more closely relevant theoretical and empirical literature to the study.

The phenomenon of “drop out” was defined differently by different scholars. Jamil et.al, (2010) has stated that children who suspend schooling and leave their education unfinished for any reason other than death are referred dropouts. This definition is very broad and students discontinuing their studies for any reason are all included other than the student's death without finishing their studies. This definition is included students of all levels of study. Students, who are disqualified by the educational institutions due to failure or weak performance in their studies, are also included. Students, who suffer from illness, are also included in the dropout definition because of their illness. It is defined a drop out any pupil leaving school before finishing a study course. This definition holds no complication of phenomenon and thus not substantially obvious. This is a widespread description that covers all pupils leaving school before completing course of study (Malik, 2002). Dropout was also defined as "pupil who abandoned his/her enrolled school program prior to the completion of the program and reasons have not been observed yet (Umoh, 1986). This definition is flexible that holds all students who for whatever reason, leaving the program of study which they planned before finishing the course. This definition of dropout is therefore a definition that is quite inclusive and focused.

Joint study conducted and explained that dropout is the removal of pupils from school at any level before finishing primary education by the (UNICEF and Government of Pakistan., 2000). They also described that drop-out is a term referred to children those left their schooling unfinished prior to complete the particular course that they have registered in the school and that the child is no longer registered at equivalent level for whatever reason.

2.2. Theoretical Literature

UNESCO Global Education Report (2012) noted that before completing primary education, there could be an imperative call for to address the high number of pupils dropping out school. Found on the universal primary education (UPE) global picture, UNESCO (2011) noted that around 31.2 million primary students left school worldwide in 2010 and may never return. Study by UNESCO (2001) on global gains in achieving Universal Primary Education (UPE), a lot of countries in the region showed to have poor completion rates for primary school, but fairly high initial enrolment figures. Several countries like Bangladesh, Bolivia, and Pakistan found it difficult to achieve Universal Primary Education due to the high levels of continued dropping out of schools. High proportions of completion would provide stronger UPE test than the enrolment rate alone. In rural Pakistan's study of primary completion rates, Lloyd, Mete and Grant (2009) noted that the rate of national enrolment of Pakistan was 83 percent, but only 48 percent completed their studies. Cameron (2005) conducted dropout rate studies in Canada and the United States of America (USA). Another study conducted by Cameron (2011) found that some places like Mississippi had dropout rate of 38 % and the overall dropout rate in the U.S in 2011 was 25 %. In contrast, in Canada the dropout rate has declined from 1990-1991 16.6 % to 2011-2012 7.8 %. Since 1990-1991 academic year, getting a 7.8% lower rate in 2011-2012. Boys' dropout rates have always been higher than girls. Canada's decline in dropout rates was most evident Provinces in the Atlantic, where dropout rates fell by more than 50 percent.

An early school dropout: Configurations and Determinants of several longitudinal studies conducted in the United States of America by Cairns et al (1989) discovered the degree of the dilemma in that country indicating an early dropout rate of 47 percent and 82 percent for both boys and girls in risk categories. Yearly number of dropouts in the US alone in 2012 was probable around 3,030,000, making 8,300 dropouts per day a study conducted by (Bacolod and Ranjan, 2005).

Therefore, dropping out of primary education students in developing countries attracted academicians' and researchers' attentions. Study findings vary according to the situations of the societies which have been distinguished, travel distance to school and even gender disparities and moreover rural and urban policy. Study carried out by Chaurd and Mingat (1996) showed students dropping out in two provinces Punjab and NWFP. They argued that student dropout is higher in public schools than in private schools. They also showed that in schools offering evening classes (double shifts), students drop out is lower. Those schools that offer double shifts are flexible for parents as they can either send their kids to school and children can help their parents in earning as well. This enables students to attend schools and help parents in earning. In addition, in single-gender male schools, the dropout is lower than in single-gender female schools. Kemal and Maqsood (2000) conducted rural and urban student drop-out study. They argued that the students' harsh treatment helped to increase student retention in rural areas whereas in urban areas such harsh treatment was not welcomed.

Study by Holmes (2003) noted factors that support students to the completion of their primary school. The scholar also recognized that less education is given to girls compared to education given to boys. It is argued by Holmes (2003) that girls due to their economic and socio-cultural restrictions hold them back to finish education of their primary schools. World Bank (1989) reported that girls get married in rural areas in their earlier phases of their lives as it is recognized that enrolling females in schools will not bring more advantages to their

parents. It is said that girls are hindered from attending remote schools and mixed schools by socio-cultural factors. Opportunity costs are more likely to vary between girls and boys in terms of lost domestic or market production. It is generally perceived that boys are less likely to assist their parents child care and in chores than girls, and thus could have lower educational costs of opportunity. In contrast, girls could have less market opportunities, because girls are less likely to be allowed to venture outside the home alone. Schooling costs of income net is modeled for boys ($Y - P_j$) and girls ($Y - P_j - \mu_f$), where μ_f is the difference between boys and girls in the opportunity cost of schooling. A different cost of opportunity for girls means that boys and girls differ in constant terms and coefficients of consumption. Education gender discrepancies could also be the result of the expected earnings disparities or tendency to send parental empathy and from those earnings as well as. These possibilities will also be addressed by the inclusion of a gender-specific intercept, even if it does not distinguish between them (Alderman et al., 2001). It is believed that by eliminating gender gaps, the literacy gap between boys in rural areas could be decreased by 40 percent. Holmes (2003), however, noted that primary schools' distance has not been an important factor in children's dropout. In addition, she suggested that school distance is an important factor that influences the continuation of intermediate study levels for girls than equal in age boys. Study carried out by Sathar and Llyod (1994) also illustrated that distance of school which is more than 1km in rural areas had significant and positive effect on the girls' school continuation. They found that 18 percent of girls have no access to nearby schools for urban children, while 50 percent have access to private and public schools, 11 percent have access to private schools, and 22 percent have access to public schools. For boys, access is much better; within one kilometer, only 5 percent have no school, while 63 percent have a choice of nearby public and private facility. Going to girls' schools in rural areas is even poorer, with 21 percent not close to any school, and the majority of those with access only have access to a public facility. Boys have more access than girls

in rural areas, but few rural children have access to private schools. Indeed, the predominance of private schools is an urban phenomenon. All children have the opportunity, of course, irrespective of residence. Primary-level attendance of girls in rural areas could be increased by 16% if the girls can simply access schools (Swada and Lokshin. 2001).

The theory which also guided the study was the theory of human capital. Education gives the ability to change their attitude to the individual and to those who come to it. Education of women helps them change their attitude towards their role in the household as well as in the place of work. This also provides girls a variety of economic opportunities (Zhan and Sherraden, 2003). This theory is also suitable for this study as educating children can enhance socio-economic, nutritional, and cultural value. Protecting children from dropping out of school increases their social rank and economic development participation. Increased productivity and skill base improvements in a country support economic and social development.

2.3. Empirical Literature

While governments have a responsibility to make primary education compulsory in some countries like Somaliland, it is not compulsory to decide whether to enroll or not to enroll a child in formal education. Enrollment in primary school is modeled on a number of factors. Study-recognized factors consist of: community characteristics and household, individual Gertler and Glewwe (1990), Glewwe and Jacoby (1994). Khandker, Lavy and Filmer (1994) split features that determine education of the child as either supply-side factors or demand-side. School access and school quality are subject to supply factors, while community, household and individual variables are subject to demand-side factors. Individual characteristics are included the age of the child, sex, and the rank of the siblings in order of age. The household characteristics are included household income, education of parent, household size, and other properties, household

composition, household head and gender, while the characteristics of the community include quality of schooling and productive location potential.

Here are the major factors concerning about the dropout of the child in primary Schools. These factors include: -Income, parent's education, early marriage, Gender, Age, roles of children, particularly girls in the Society, domestic labor. These factors also affect primary school children's academic achievement and retention. Other factors other than those mentioned here include parental loss due to divorce and death, many parents are unable to pay tuition fees school, unable to buy uniforms, pens, books and school-related expenses, drug abuse and pregnancy. Other school factors that need to be addressed, such as, bullying by other students especially boys, physical punishment by teachers, lack of good school facilities and theft, religious factors, lack of initiatives that are unfavorable to accessing and dropping children in primary school education.

2.3.1. Effect of Household Size on Child School Dropout

Household size greatly impacts the schooling of children. Children from households with more siblings are more likely to join in school afterward, repeat grades more frequently, and leave school before completing their studies compared to children with fewer siblings. The financial burden is therefore greater with a larger family, subsequently that children often drop out and are less likely to go to school (Enyegue et al., 2000). Chugh (2011) conducted study in India and found that family size greatly affects the schooling cycle of children. Larger size families in number are less likely to enroll early and often have higher probability of grade repetition and finally drop out. The potential workload is therefore greater with larger family size probability of the children to attend school is lower and often withdraw school. The resulting increases were 41% and 68% respectively at the junior and senior secondary levels. Households with more than one school going child in the family, it becomes all the more complex. Moreover, if we look at the sample households' family size, chugh found that about 45% of households (193

households) have five members and about 21 percent of families had six household members. A study by Enyegue (2000) also found that households that have a child with more than six siblings had a 36% odds ratio of being dropout compared to family with smaller siblings.

Hossain (1990), Neumark (1988), Gomes (1984), Knodel and Wongsith 1991; Behrman et al (1989), Knodel et al (1990) and Hanushek (1992) showed siblings' effect on educational achievement for industrialized and developing countries and concluded that children with larger families have lower probability to retain schools, are less likely to perform tests of intelligence and are less well-nourished. For smaller families, child human capital investments are bigger and documented. In fact, parents planning to endow a lot (child quality) in their children have smaller families (quantity of children). Children's investment and the number of children are surrogates, and that less children directly cause more investment in education per child.

A literature based primarily on the U.S. found for industrialized countries, that the magnitude of change in achievement indications are best considered when one goes between two stable countries. Family sizes' distribution, reflecting the figure of the resident children of eighteen years old or under, eighteen separate birth cohorts' children are included of a given year. As family distribution changes by time, family size of different patterns will be faced by each of these birth cohorts, and the existing pattern at the time a cohort takes, the Stochastic Aptitude Tests will not essentially indicate cohort's history well. The size of average of the family increased until 1950 through the 1965s and then fell. During its schooling years, the cohort peaked 18 in sizes of family will have experienced smaller sizes of family than a later cohort that is likely to be born into larger families and experience the size of these larger families all through years of school. There is therefore a swap between the number of children and the achievement of education (Hanushek, 1992). Household size affects accomplishment, and it has significant benefits to be early in birth order. This is not due to favoritism, but because of the

higher likelihood of becoming in a small family. A study by Behrman and Taubman (1986) found important birth-order impact on education of adult and earnings achievement even after the number of siblings and birth-order positions is controlled. While the spacing effect is not as powerful as the sibship size effect, spacing is more consistently and more closely related to achievement of education than the other more generally examined sibship parameters, such as order of birth. Even after adjusting for potential spacing factors (e.g. sibship size and family background), the impact of spacing on leaving secondary school and attending post-secondary school are flexible. Due to the sibling effect spacing are taken into account after socioeconomic status, it is not affirmed the claim that spacing effects are mainly due to the interrelationship between these two variables. Close childbirth spacing rises the chances of leaving secondary school and lowers the likelihood of tertiary education attendance (Powell and Steelman, 1993).

Spacing effect is closer to attainment of education than the order of birth. Studies of a large, nationwide survey representation from the developing world showed that size of the family has significant negative impact on the likelihood of a pupil going to high school in Thailand. Most likely, the principal mechanism causing this impact is the strength of household funds obtainable per child related to more children. The level of education and the extent at which this effect works varies with level of household's possessions and urban or rural location. For the reason that the reduction in fertility leads to a significant raise in the percentage of children with smaller families, decreasing rates of birth add to increased education in Thailand (Knodel and Wongsith, 1991). Results from a survey carried out two rural sites in Thailand by Knodel et al (1990) revealed that family size has a significant effect on education of the children. There is an inverse association between the size of the children a family has and the probability that a child will enroll in school further than the level of mandatory, even after controlling the attainment of schooling for other important determinants. Results of the survey revealed that parents are directly responsible for funding the education of children.

Therefore, more children are readily translated into insufficient or reduced available resources of each child and therefore less schooling. Provided the inverse proportionality between educational attainment for children and size of the family, the ongoing decrease in fertility tends to add to higher education level by altering children's distribution according to size of the family.

2.3.2. Parental Education

In order to know the highlights of the benefits of educational investment and to identify the factors underlying household decisions on children's education, and in particular girls' schooling decisions, is important. Parent education was found to be one of the most important determinants of child education in many studies. Of particular concern in countries of East Africa, where incomplete pooling of household resources seems to be the custom and wife and husband preferences can swerve natively, is whether fatherly and maternal education affect equally on education for boys and girls. Educated women are supposed to have strong willpower to educate their daughters (preferences that their spouses may not share) as well as the ability to ensure allocation of household resources purposively for this. As a result of these factors, if the education of mothers has a greater impact on education of girls than on boys, there would be another rationale for public investment in female education: the effects of intergenerational of such investments will reduce greatly in the gender gap in education and finally in future earnings. Poor parents and their children's attitudes towards educational benefits are rarely well understood. Many poorest parents were reported to have either little or no perception of the educational gains during the fieldwork, thus many children do not enroll or do not go regularly to school for the reason that, especially secondary education their parents do not value education.

In addition, the study showed that household members' educational level is predominantly significant in determining how long and whether children have to attain education. Ersado (2005) conducted a study on three countries and found that

level of education of the parents are important factors in child education and employment in rural and urban areas alike of all the three countries and also to contribute significantly by reducing child labor and improving the chance of pupils will remain schools. According to experimental facts from other Latin American countries, improving child labor market conditions in terms of higher wages per hour raises the intensity of work and the likelihood in Zimbabwe and urban Peru, having insignificant impact in rural areas. Improving conditions on the labor market for adult labor causes to a decreased likelihood of child labor and an increased likelihood of education. This may help to control child labor involvement and raise the likelihood of children staying in school.

Mother's likelihood of working away from home and household responsibilities will have a less impact on rural child labor and schooling decisions than on urban child labor. This shows that in urban child labor decisions, the accessibility of different childcare choices could be more significant than in rural areas. The education of parents is the most accurate determinant of the education of students. Higher education levels for parents (household head) are linked to higher attendance rates, lower dropout rates and increased access to education (Ainsworth et al, 2005). There are several reasons for connecting parental education with school retention. Some researchers have pointed out that uneducated parents are incapable to give support or are often unaware of the advantages of education (Pryor and Ampiah., 2003). Park and Brown' (2002) research in China also found that girls enroll in primary school later than boys and that the likelihood of earlier enrollment of 9% is increased by an additional year of father's education. Finally, their variables of school quality do not significantly enter the initial decision on enrollment. It was estimated that his child would drop out of school from 12 to 14 percent. Research by Al Samarrai and Peasgood (1998) in Tanzania found that education of the father is significantly influential on high school education for boys; and mother on girls. AlSamarrai and Peasgood (1998) argue that schooling of girls is preferred by educated mothers, entailing that mothers strongly prefer for the

education of their daughters and that their education allows them either to increase their economic status or their decision-making power of the household. Glick and Sahn's (2000) findings from urban poor in West Africa also found that improvements of father education lift education of both sons and daughters, but education of mothers has significant effect mainly on education of daughters; these estimates suggest differences in paternal and maternal for predilections of education of girls.

The responsibilities of the household, signified, for instance, by the number of siblings who are young, strongly affect education of the girls but not boys. Consequently, policies such as subsidized childcare can increase their ability to obtain an education by reducing the opportunity cost of girls' home time. Ersado (2005) suggests that providing adult education programs to address the educational gap faced by many households could be helpful in strengthening many students' continued access to education. Study indicated that the placement of members of household on schooling is a major factor in determining whether and for how long students are gaining access to schooling, but less research is being done on how this can attribute to dropping out.

2.3.3. Effect of Household's Come on Child School Dropout

Household income has been recognized as a significant factor affecting access to schooling since education has potentially incurred a range of upfront and hidden costs. The hidden costs of sending a child to school include uniforms, travel, equipment, and the cost of opportunity, while upfront costs are like school fees. Income of the household is associated with a variety of factors: once the children are enrolled in school, whether children frequently attend to school and if children must leave for a limited period of time and also at what time and if they abandon from school (Croft, 2002). Cardoso and Verner (2007) noted that for children to drop out, poverty had the biggest contribution cause. They noted that the main push -out and drop -out factors leading to dropouts of school in an urban

environment-Fortaleza, Brazil's Northeast shanty towns. They conducted a comprehensive survey of the risks faced by the population of both genders in these regions, covering both children enrolled and not. In pushing teenagers out of school, they also focused on the role of child labor, poverty and early parenthood. In empirical analysis, some of the determinants of potential problem are addressed. The authors used group of variables which were available and the instrumental variables approach was applied. Early parenthood is connected to the age confirmed by the youth as the perfect age for beginning to have sexual relations. Work is also managed using the declared reservation salary (minimum workable salary). Work is also managed using the declared salary of the reservation (smallest amount payment). Outcomes show that early parenting strongly influences driving young people to dropout.

Poverty rate is another factor that reduces enrollment in school, as youth who have been hungry have less probability of attending school at some point in their lives. Working in this specific context of urban does not necessarily have an adverse effect on school attendance, which could be linked to the fact that dropping out of school most often leads to inactivity rather than work. Dachi and Garrett (2003) raised a sequence of questions about the financial status of the enrollment of the children of Tanzania's schools to parents / guardians, all responding households replied the major obstacle to enrolling children to school has been more financially related and incapability of paying their school fees. Both empirical research and statistical data propose that pupils from households which are rich have higher probability of staying in school; on the other hand, children are from households which are poor have more likelihood to either never go to or to drop out after their enrollment. For instance, the study by Brown and Park (2002), in rural China found that credit-constrained and poor kids had probability more than 3 times to leave school than other kids. The relationship between wealth and school retention was illustrated in more detail by Rose et al (2000): school dropouts had average wealth index higher than those who never enrolled at school among those out of school.

Children from better-off households had higher mean of school dropout compared to the school age children who never attended school (Colclough et al., 2000). Moreover, the pressure on pupils to leave school increases especially for children from poorer backgrounds whenever their ages increase, especially when the cost of opportunity of their time rises. Members' household work patterns affect possible available expenditure and if income is coming. Chugh (2004) looked closer at patterns of no-access and access in slums in Bangalore, India showed that the father's earnings were associated with the school pupil's continuity or discontinuity; most dropout children had unemployed fathers.

Children may possibly be asked to support the income of the household, through either wage-earning self-employment or doing additional tasks to stop other members of the household working. This emphasizes that when children's ages increase, their time's cost of opportunity also rises. How people consider education and how important it is at times could create connections between education, income of household and dropping out. For instance, the study carried out by Pryor and Ampiah (2003) on education in a Ghanaian village explained that schooling is considered to be 'opulence,' with a lot of villagers believing schooling to be of no value. Research showed the relationship between household income and school dropout. Fuller and Laing (1999) found a relationship between access to credit and the financial strength of a family, estimated by household expenditure level, and the probability of pupil retention in South Africa's schools. In determining when girls leave school, they decided to advance theoretical understanding of the role of the character and practices of the family, particularly variability in the work and social demands that parents place on daughters. First, they reviewed how sociologists and economists within developing-country settings represented the school achievement process. Second, authors report among young black South Africans on our household-level study of female school achievement. After evaluating the economic and social factors that explain local variation in the

school achievement of girls, authors also examined how these factors help explain whether and when girls leave school.

Study carried out by Kadzamira and Rose (2003) illustrated that as the costs of education get higher for Malawi households, the poorest household's children have lower likelihood of attending schools and this concurs with the findings of studies in Guinea by Glick and Sahn (2000), which showed that as the income of the household rises, investment of education for the children is greater.

2.3.4. Effect of Early Marriage on Child School Dropout

Increasing global attention is also being given to child marriage before 18 as a matter of both reproductive health and human rights. Its negative effect on educational achievement is chief among the arguments made for its exclusion. However, such arguments are not grounded empirically. Countries where early marriage is very common are more likely to be similar to countries where level of scholastic achievement, on average, stays well below levels tends to disagree with the norms of marrying early. Consequently, the age at which they marry in most countries where early marriage is common and the age students leave school; there is typically a gap of several years. Marriage by single year of age and cross-sectional data on school, when 50% of young women left school and 50% married suggest an average gap of about 3 to 5 years (NRC/IOM, 2005). On the other hand, in sub-Saharan Africa, where children are familiar with starting attending primary school in their late adolescents and still starting school late Mensch and Lloyd (1998) and Hewett and Lloyd (2005) found that girls got recent dramatic increase in participation of education and achievement, more relevance was given to the question of the association between education and early marriage.

Holmes' (2003) study also indicated that in general; women obtain less schooling than men, and for economic and social-cultural reasons women are more likely to drop out, or be suspended earlier. The opportunity cost of enrolling female children to school in rural areas, where girls are married pretty early is argued to be

high as their schooling advantages will not build up to their parental household. Likewise, Kasente, (2003) and Kakuru, (2003) demonstrated how dropping out of children from school is influenced by early marriage, particularly with regard to the female pupil, as parents are supposed to marry off the girl child as a getaway from being poor. It was pointed out by Participatory Poverty Assessment UPPAP (2000) that girl's family would benefit in terms of the bride price when they marry off her to a man. Odaga and Heneveld (1995) found that parents are concerned about devoting funds on girls' schooling as they tend to become married or pregnant prior to finishing their education and girls become part of another family and investment of parents in girls is lost once married, which is why parents continue to discourage the girl's school progression.

In addition, the effect of early marriage on girls, Holcamp (2009) indicated that dropout rates for girls in rural areas have increased because parents consider schooling for girls to be of no value once they are moved to their own family after marriage. Mansory (2007) also showed that girls' dropping out early school in Afghanistan was caused by early marriage. Similarly, many studies highlighted the education of girls and their age also explored that parents regard as an appropriate time for girls once girls reach puberty to marry and are more likely marry off them rather than advance education (Molteno et al., 2000). A few scholars argue that in certain contexts dropouts is associated with girls' early marriage. In societies, for example, where women are moved after marriage from parental households, the dropout of girls in that society may be higher (Ackers et al., 2001). India's PROBE team (1999) told in their report that education in that country could provide better marriage preparation for girls. Nevertheless, parents sometimes refuse to allow their daughters progress schooling because higher schooling level increases the cost of marriage of the girl. Study by Shahidul (2012) showed that girls from households of lower socioeconomic backgrounds in Bangladesh are dropping out of high school once schooling or higher schooling increases gift in the girls' marriage market. This study, the scholar also argues that if women are households

with a lower socio-economic background, they face difficulties in continuing schooling and are more likely to have their marriage arranged in which parents need to let their daughter have a better life thinking that the investment in education of girls is worthless, resulting in early dropout among girls.

2.3.5. Effect of School Location (Distance) Dropout

Distance of school has significant effect on children's school dropout, particularly, girls. Parents are extremely worried to send their young daughters and even children as a whole to school when school distance becomes remote from their home. Moreover, in rural areas where most students travel to school more than 7 kilometers, have the highest proportion of primary school dropout. The distance the children would have to travel to get to school every day and the populations to be served are the main consideration of the school location. This became the worry of the educational policy planner using school densities as a rough index of the school's location and expansion as well as service advancement. Consequently, in educational planning, the remoteness traveled to school has to be essential for school location and approval. Conversely, it appealed the researcher that despite this, there is a shocking most of Nigerian students and pupils walking long distances every day from and to schools, particularly in rural areas (Arubayi, 2005) and (Duze, 2005).

Another worrying source is that how long the school is travelled to and from, has some degree of association with illnesses such as absenteeism, negligence, lateness, indiscipline, truancy and non-school presence. These problems affect achievement at school either individually or collectively. Moreover, when the distance to school gets too far for the child to travel to school, there is a likelihood for the child to lose interest in school and to start not going to school properly and eventually drops out of school and becomes truant, besides tiredness. Statistics in Nigeria indicate that more than 30% of high school students and 50% of primary school pupils are leaving school every year, and in several

states lie east, this is worse. It was also noticed that there are abundant cases where children travel to school on foot for up to five kilometers. Even if they could afford to travel for such long distances by car, motorcycle or bicycle, the pressure of traveling to school depressed the pupils, and the street requirements left guardians and parents worried awaiting pupils come back their residence unharmed. Once more, schools are overpopulated due to their unusual problems related with excess numbers in classrooms, locations, staff and infrastructure, poor attendance and inadequate provision of services by students due to inadequate classrooms (Arubayi, 2005) and (Duze, 2005).

2.3.6. Individual Characteristics

A child's age is significant in the decision to enroll in primary school. It has been found that the age of a child is positively related to enrolling in primary school and statistically significant. Authors also examined factors such as, household (e.g. household head gender, parent education, household income, composition of households and other assets), community characteristics (including schooling quality) and individual. Ages, gender, age rank among siblings are important among the individual characteristics and household size. It is reflected the absolute cost of educational opportunities by age. Given the possibility of parental preferences for boys over girls' schooling, child's sex is potentially important as a result of estimated lower returns for girls owing to labor market favoritism, lower daughter payments than sons and lower female participation rates. The probability of being enrolled increases with child age at a decreasing rate (Mariara and Mwabu, 2007). Similarly, in Tanzania, Al Samarrai and Peasgood (1998) found that the likelihood of enrolling primary school was positively correlated with a child's age and was significant, both boys and girls. This means there is lower probability that younger children will be enrolled in primary school. The study of authors focuses on how individual features and household influence whether or not a pupil attends primary school, finishes primary school, and goes to

high school. The regression analysis clearly indicates significant intra-household disparities between how the influence of fathers and mothers on resource decisions affects outcomes differently and how household characteristics influence outcomes for boys and girls. For instance, when considering the selection to enroll in primary school, the schooling of mother has a greater influence on girls, but the schooling of the father has a greater influence on boys.

In addition, the schooling of married mothers may raise the likelihood of girls' enrollment in high school by 17.6 percent for high school education and another 9.7 percent for primary schooling, but it does not have significant impact on boys' enrolment. These results show that mothers strongly prefer educating their daughters and believe that education gives them either increased economic status or increased decision-making power in the household. Ngware et al (2008) showed that there is positive association between primary school enrolment and the age of a child. They also examined that there was a 50% chance that child would be enrolled in Kenya's primary school once the age of a child is increased one year,

Glick and Sahn (2000) illustrated the possibility of enrolling a child in primary school; particularly in Guinea is related to how old the child is. It is also expected that the cost of opportunity of enrolling the boy child to school will be lower than for the girl child owing to the girl child's expectation of loss of housework and income, although income loss may be higher for boys' education. Handa et al (2004) study showed that a child's age in Mozambique has no effect on decision to enroll in primary schools in rural areas but not in urban areas. This is opposing to Al-Samarrai and Reilly's (2000) findings in Tanzania that primary school enrollment rates are increasing in both urban and rural areas as children's age grows. Similarly, Moyi (2012a) and Moyi (2012b) and Bedi et al (2004) found that a child's age had positive association with enrolment of school in Somalia and Kenya. On the other hand, children might leave school as children's age increases, however when the child is the oldest sibling in the household, there is a greater chance of enrolling in school (Nielsen, 2001).

The child's gender was also found to be an important determinant of dropping out of school. Handa et al. (2004) found in Mozambique that the probability of enrolling boys in rural areas was higher than that of girls enrolled in school. Likewise, Rahji's (2005) study indicated that girls had lower probability of attending school in rural South West Nigeria than boys. The reason that schooling for boys is preferred to be a better investment than schooling for girls is explained by beliefs and cultural norms or traditions. Moyo's (2012a) and Moyo's (2012b) studies showed that girls had lower probability of investing in education in Somalia than boys; enrollment disparity among gender has been reported in both urban and rural areas. Likewise, it has been mentioned by parents in Guinea that primary education is inappropriate to the future roles of girls and thus, unlike boys, girls are not equipped with education needs (Glick and Sahn, 2000). In contrast, Glick and Sahn (2000) argues that, due to low work market returns to girl schooling as a result of work market inequity against women, parents strongly prefer the education of boys, in comparison to girls' education. Another reason that makes gender an important determinant of child education is lower than boys expected remittance from girls. Boyle et al. (2002), for example, suggested that households tend to see the education of boys bringing greater future economic rewards than the education of girls.

2.4. Summary of the Literature Review

A variety of relevant literature reviewed all seem to show that school factors contributing to students dropping out of primary school are mainly changeable because they can easily be altered through a proactive approach by school management, gender awareness, enhancing livelihood of the households and members of the community working together to categorize risk factors and making early interventions aimed at preventing dropping out before it occurs. However, in Somaliland little has been done to recognize school factors contributing pupils leaving school, making the designing of evidence-based interventions difficult,

thus this study indicated the needed evidence-based interventions. All relevant literature reviewed agree on the fact that dropping out is determined by a number of factors compounded by a combination of factors before the pupil ultimately drops out. Prior to dropping out a pupil shows observable behavioral signs demonstrating that he or she is at risk of dropping out by showing 'at risk' signs consistent with dropping out.

Therefore, the active commitment of adults especially teachers can go a long way in stopping dropping out. Preventing school factors contributing primary school pupils dropping out of school needs changing the way schools operate in terms of school policies, teaching methods, student-teacher interactions, time tabling, guidance and counseling services, teaching of literacy skills, remedial programs, career guidance, disciplinary procedures, language of instruction, grade repetition, poor performance, scornfulness, bullying, labeling, sanitation, personality conflicts with teachers and school management styles with the intention of creating inviting school environment.

In Somaliland, the Ministry of Education and Science has national education policy draft and does not include school factors that contribute to students' dropouts. School factors are classified under other factors undermining the influence they have not only on students dropping out of school but also on those would be applicants to be enrolled due to the negative influence they have on children's perception of school. It is hoped that this study will endeavor to bring to attention of policy makers the influence that school factors have on dropping out of primary school.

3. RESEARCH METHODOLOGY

3.1. Introduction

This chapter discusses methodology employed in the study. The methods and the procedures discussed have been motivated by the reviewed literature both theoretical and empirical in the previous chapter and the type of data available.

3.2. Statistical Technique

Model estimation with binary dependent variables can be used three methods; linear probability model (LPM), logit model or probit model (Gujarati 2007). Although it has severe constraints (normality assumption breach, heteroscedasticity, and estimated likelihood outside 0-1 boundaries), the LPM is the easiest to use of the three models. A probability model that has an S-shaped feature of the cumulative distribution function is usually required. Logistic in practice and the normal cumulative distribution function (i.e. logit and probit model respectively) are selected. This is because the nonnormality assumption and the likelihood of the dependent variable lying outside the (0-1) range is corrected (Gujarati, 2007). Therefore, in this study, Logit techniques were adopted. The estimated significance coefficients and tests for all models shown in Tables 4.1, 4.2, 4.3 and 4.4.

In one respect it is possible to interpret independent variables' effects from Logit estimates just like estimates from Ordinary Least Squares: p-value shows the significance of the effect, indication of negative or positive effect of the coefficient from the parallel explanatory variable, unlike, Ordinary linear Regression the size of the effect depends on other explanatory variables' values, since the model of logistic takes on a nonlinear functional shape.

These study models have been designed to determine the independent variables' marginal contribution to the likelihood of dropping out conditions of two sets. The initial model illustrates pupils from households currently live in

urban and the effect of sex child, household income, marital status, parents' education and households on primary school dropout. The second model depicts pupils from households currently live in rural areas and the effect of sex child, household income, marital status, parents' education and households on primary school dropout. It is possible to compare the probability of dropping out for individuals with the same set of characteristics because the same independent variables were used on each model. The discussion below focuses on those independent variables that show significant effects on the likelihood of dropping out of primary school.

3.3. Conceptual Framework

Farah, N., and Upadhyay, M. P. (2017) used Probit model to find out how household characteristics related to school dropouts. On the contrary, the logistic regression model used in this study, which is a non-linear linear regression transformation, limits the expected likelihoods between 0 and 1. Finney (1971) once, it is compared to other dichotomous categorical models like Probit models, logit models treat high and low potency models better than Probit models and are as a result more fitting when considered the dichotomous response variable to be an underlying equal distribution (large tails). This study's logistical modeling approach follows (Mike et al., 2016). The same methodology has been adopted to examine the dropout determinants using information on the level of household, dummy variable has been used, S3_AC09, which is given the value 1 when the child is recorded dropout and 0 if not. Logistic model has been used regardless that it is in nature a binary categorical variable, but in comparison to the Linear Probability Model, the Linear Probability Model gives false result as its probabilities of estimation may exceed 1 and sometimes provides values less than 0, which ruins the precision of the prediction values if used in an analysis. Figure 1 illustrates the logistic model.

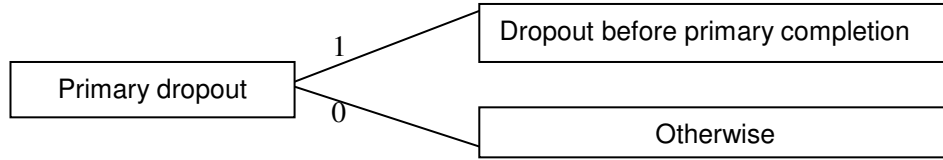


Figure 3.1. Logistic Model

3.4. Model Specification

Logit model has been used for investigating probability of primary school dropout determinants. The dependent variable (DROPOUT) will take the value of 1 if the child in a household left primary schooling, otherwise it will take value of zero. Whether an individual drops out of school or not is determined by sex of the child, parental education, income, household size and the marital status that are defined by the following nonlinear relationship. The empirical logistic formula for primary school dropout pupil used in this study was estimated as:

$$\text{Prob}(S3_AC09=1) = f(\text{maritalstatus}, \text{sex2}, S13_G11_6, S1_HHSIZE...) \quad (1)$$

Where:

S3_AC09: Dropout of the child, S3_AC09 is 1 if dropout and 0 otherwise,

S1_HHSIZE: Household size of the dropout pupil,

Sex2: Sex of the dropout child between ages 5 and 24,

Maritalstatus: Marital status 0 never married 1 married,

S13_G11_6: Distance of the primary school from the household,

S3_AE21A: Income of the household,

Parent: Parents' education, Educatedparent is 1 if parent is educated and 0 otherwise.

3.5. Data Source and Sample Selection Processes

To explore the school dropout for primary education in Somaliland, this study used the Somaliland Household Survey (SHS) 2013. The Somaliland 2013 SHS was implemented by Worldbank, in cooperation with Central Statistics Department. In 1991, Somaliland declared itself independent. 873 rural and 852 urban households were interviewed in the survey. The sample had been drawn randomly based on a clustered design of multiple levels. This dataset holds information about the characteristics of income, household and consumption. The sample represents rural parts of Somaliland, as well as urban Somaliland Nomadic or conflict-affected households are excluded. The code reproduces and data some of the findings from the original SHS 2013 submission, but also comparable estimates of poverty to those acquired from the SHFS. There is no census-based framework for Somaliland to use to design a representative sample survey. Surveys carried out in Somaliland are based on the 1990 UNDP village population survey. In 2013, when the Somaliland Household Survey was being prepared, sampling specialist recognized that this village survey was probably not the most accurate given the time that had elapsed and the possibility that centers of population would have been moved (known, political, cultural realities and climate). Other frames, including a water point survey and the latest voter registration database, have been assessed for feasible use as an alternative of the UNDP village list. The voting registration lists have been compiled and reviewed, and although in some of the counts there were apparent inaccuracies, it has been decided that the number of registered voters with the list of polling stations would be at least more correct in representing PSU as settlements. Furthermore, with the exception of the Sool and Sanaag regions where security concerns were raised, most villages had GPS locations and could therefore be geo-referenced.

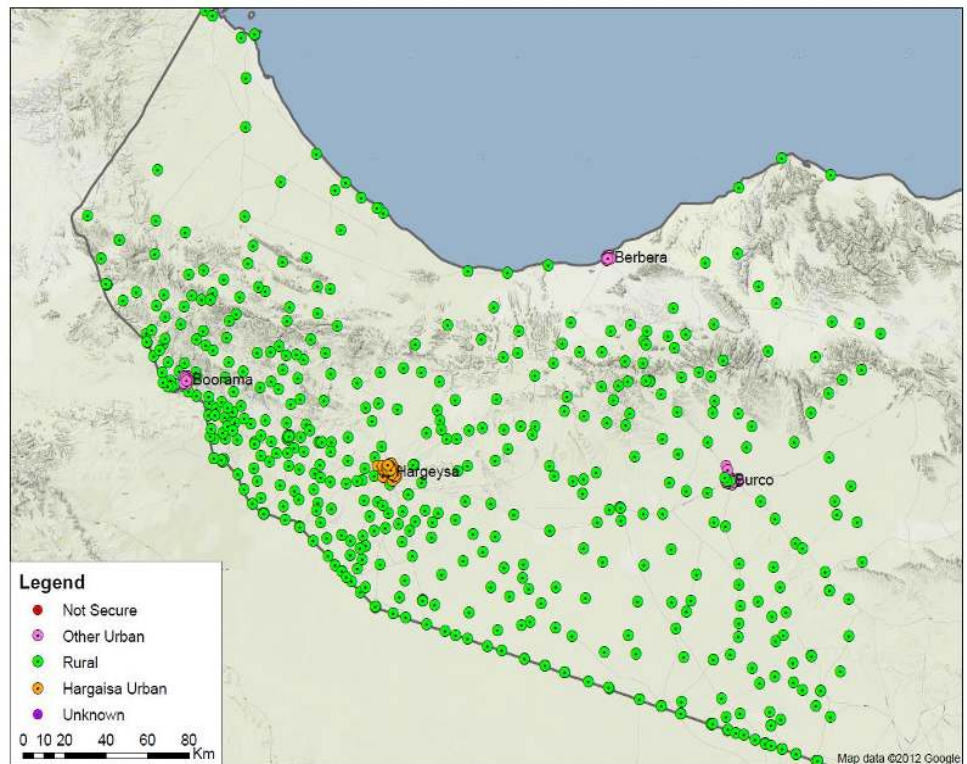


Figure 3.2. Map of Somaliland of Surveyed Areas
Source: (World Bank, 2013.)



4. RESULTS AND DISCUSSIONS

4.1. Introduction

Results and discussions illustrate and discuss the study results in more detail. The first part shows the descriptive statistics of all variables included in the study. The second part explains results of logistic regression and discusses the output.

4.2. Descriptive Statistics

Table 4.1 the descriptive statistics of variables is shown like minimum and maximum, standard deviation and the mean that the study used into account to examine the primary school dropout level of households in Somaliland. The descriptive statistics of households sampled have an average household size of 6 persons per household with maximum family size of 23. The average distance of the sampled households is 7.3 km far away from primary schools per household and the maximum distance to school is 25 km. Moreover, households surveyed have an average monthly income of about \$207. On the other hand, the parents of the surveyed population, (40%) had ever attended school: can read and write and this is an indication of low literacy rate of the parents in Somaliland. On contrary, (60%) of parents surveyed are illiterate: never attended school. Proportion of the pupils of boys and girls between 7 to 22 years, (49%) is for males and (51%) is for females. (27%) of sampled respondents were married and (72%) have never married.

Table 4.1. Descriptive Statistics of the Variables

Variable	label	Observations	Average	Minimum	Maximum
S1_HHSIZE	Household size	1,725	6	1	23
S13_G11_6	Primary school distance	1,725	7.3	1	25
S3_AE21A	Household income	1,725	207.23	50	1950
Distribution of categorical dummy variables					
Variable	Value label	Observations	Frequency	Percentage	
Parent	1 attended school 0 otherwise	10741	1=2,120 0=3,124	1=40 0=60	
Sex2	1 male 0 female	10,741	1=2,705 0=2,803	1=49.11 0=50.89	
maritalstatus	1 married 0 Nevermarried	10,741	1= 2,901 0= 7,840	1= 27.01 0=72.99	

Source: (Author's calculations)

4.3. Model results and Discussions

Table 4.2. Determinants of primary school dropout in Somaliland

S3_AC09	Dy/dx	Std error	Z	P> z	95% of CI	
Maritalstatus	0.345	0.103	0.440	0.049	-0.156	0.247
Sex2	0.230	0.080	0.370	0.002	-0.126	0.186
S13_G11_6	0.512	0.102	1.280	0.010	-0.001	0.006
S1_HHSIZE	0.635	0.016	-2.190	0.019	-0.066	-0.004
S3_AE21A	-0.490	0.000	-0.060	0.024	0.120	0.300
Parent	-0.613	0.127	-0.500	0.011	-0.312	0.185
Number of observations = 87						
Likelihood ratio chi square(6) = 7.41						
Probability > chi square = 0.001						
Logarithm likelihood = -36.28			pseudo R squared = 0.1901			

Source: (Author's calculation)

Table 4.2 indicates the determinants of primary school dropout in Somaliland. The LR Chi-square (7.41) is significant at the 1% level indicating the goodness of fit of the logit model in measuring the determinants of primary school dropout. This table also shows that the number of observations which is 87, Prob

>chi2 is 0.001 and Pseudo R2 which is 0.1901. Marital status lowers the probability of a pupil to proceed up to secondary school and it is significant at 5% alpha value. Sex of the child, particularly being a female pupil is more likely to leave before finishing primary schooling and this is the perception of the parents that prefer to send their male children to school and keep female pupils to do chores in house. and it is significant at 1% alpha value. The distance of the primary school shows that a pupil going to a faraway primary school is more likely to drop out from school, and it is significant at 5% alpha value. The positive value of coefficient of household size variable indicates that the primary enrolled child who is from a large family size is more likely to dropout, all above it is significant at conventional alpha levels 5%. The pupils from a higher income household are less likely to drop out from school and it is statistically significant at 5% alpha value. Moreover, pupils having educated parents are less likely to drop out and it is believed the reason of a child not to drop out is the positive perception of the parents' education. Unfortunately, it is not statistically significant at 5% alpha value.

Table 4.3. Determinants of Primary School Dropout in Urban

Udrop	Dy/dx	Std error	Z	P> z	95% of CI	
Maritalstatus	0.245	0.202	0.210	0.148	-0.041	0.760
Sex2	0.391	0.630	0.401	0.000	-0.320	0.051
S13_G11_6	0.412	0.004	1.004	0.007	-0.271	0.156
S1_HHSIZE	0.335	0.702	-1.000	0.019	-0.429	-0.104
S3_AE21A	-0.521	0.004	1.080	0.000	-0.312	0.334
Parent	-0.466	0.804	0.460	0.020	-0.324	-0.017
Number of observations = 31						
Likelihood ratio chi square (6) =6.01						
Probability > chi square = 0.022						
Logarithm likelihood = -23.12				Pseudo R squared = 0.135		

Source: (Author's calculation)

Table 4.3 shows the determinants of primary school dropout in urban areas. The LR Chi-square (6.01) is significant at the 5% level indicating the goodness of fit of the Logit model in measuring the determinants of primary school dropout. This table also shows that the number of observations which is 31, Prob >chi2 is 0.022 and Pseudo R2 which is 0.135. Marital status increases the likelihood of a child to dropout from primary school, but it is significant at 10% alpha value. Sex of the child, particularly being a female pupil is more likely to leave before primary school completion and it is statistically significant at 1% alpha value. The distance of the primary school shows that a pupil going to a faraway primary school is more likely to drop out from school and it is significant at 1% alpha value. The positive value of coefficient of household size variable indicates that the primary enrolled child who is from a large family size is more likely to dropout and it is significant at conventional alpha levels 5%. The pupils from a higher income household are less likely to drop out from school and this is because these pupils get school expenses paid and it is not statistically significant at 1% alpha value. Moreover, pupils having educated parents are less likely to drop out and it is believed the reason of a child not to drop out is the positive perception of the parents' education and it is statistically significant at 5% alpha value.

Table 4.4. Determinants of Primary School Dropout in Rural

Rdrop	Dy/dx	Std error	Z	P> z	95% of CI	
Maritalstatus	0.330	0.050	0.290	0.030	-0.024	0.202
Sex2	0.700	0.130	0.240	0.029	-0.005	0.013
S13_G11_6	0.551	0.093	0.950	0.004	0.020	0.086
S1_HHSIZE	0.480	0.036	-1.481	0.044	-0.023	0.022
S3_AE21A	-0.261	0.101	-0.310	0.010	-0.077	0.050
Parent	-0.393	0.200	-0.533	0.009	0.113	0.820
Number of observations = 46						
Likelihood ratio chi square(6) = 6.51						
Probability > chi square = 0.020						
Logarithm likelihood = -28.23				Pseudo R squared = 0.161		

Source: (Author's calculation)

Table 4.4 shows the determinants of primary school dropout in rural areas. The LR Chi-square (6.51) is significant at the 5% level indicating the goodness of fit of the logit model in measuring the determinants of primary school dropout. This table also shows that the number of observations which is 46, Prob >chi2 is 0.020 and Pseudo R2 which is 0.161. Marital status increases the chance of a pupil of dropping out of school and it is statistically significant at 5% alpha value. Sex of the child, particularly being a female pupil is more likely to drop out before finishing primary school and it is statistically significant at 5% alpha value. The distance of the primary school shows that a pupil going to a faraway primary school is more likely to drop out from school and it is significant at 1% alpha value. Young children cannot travel far away and parents are less willing to send their children to school in the absence of an adequate transportation system. Another factor in low attendance rates and higher dropout rates is the lack of schools in rural areas and large distances from such schools. School busses are familiar in industrialized countries and therefore school distance is usually not a factor in higher dropout, but in rural areas of Somaliland there is no such busing system. Likewise, the government does not provide buses in urban areas, and private hires make urban commuting expensive and out of reach for a number of poorer households with negative drop-out consequences. The positive value of coefficient of household size variable indicates that the primary enrolled child who is from a large family size is more likely to dropout and it is statistically significant at conventional alpha value 5%. The pupils from a higher income household are less likely to drop out from school and this is because these pupils get school expenses paid and it is statistically significant at 5% alpha value. Moreover, pupils having educated parents are less likely to drop out and it is believed the reason of a child not to drop out is the positive perception of the parents' education and it is statistically significant at 1% alpha value.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Chapter five summarizes the findings of study relating to examining determinants of primary school in Somaliland. It also gives the recommendations and conclusions of the study and hence gives suggestions for improving educational policy.

5.2. Conclusions

This study adopted logistic regression to explore factors that affect primary school dropouts in Somaliland, particularly children of this age group 5-24 by approximating primary school dropout levels of the children in Somaliland overall and also for rural and urban area of residential. The outputs propose that the pupil from a bigger household size is 65.3% more likely to dropout and this is because the poverty in the household increases with size of the family. There is also gender disparity between males and females that estimates show that female pupils have higher probability of dropping out of school prior to finishing primary schooling. The regional background effect brings out that primary school dropout is mainly lower in urban areas than rural areas. The higher dropout rates for females' education could also be the effect of cultural and social norms forced by wealthy as well as poor but traditionalist parents in urban and rural areas. Moreover, the larger travelling distances from residential areas to primary schools the higher the probability of the pupil to drop out from school.

On the other, it was found that there is a significant association between pupils' progression of primary schooling and the literacy of the parents; pupils with literate parents have lower probability to drop out from school indifferent to their residential because of the positive perception of the literate parents' education. It was found that household's income is strongly related to pupil's progression of school. The negative sign of the coefficient of the household income shows that the

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child is less likely to drop out and the growth in income will increase probability of the child to progress schooling. Households with higher incomes add more weight to school progression of the pupil as these households are able to pay all the cost of schooling. Therefore, the likelihood for pupils to continue schooling from such high-income households is high. It was also found that marital status has negative impact on school dropout across both urban and rural areas. Which means the divorce of the couple encourages children's school dropout because the divorce takes the attention of the couple to take care their children's schooling.

5.3. Recommendations

These are the recommendations of the findings of the study: Pupils from households large in size are more likely to drop out demonstrating that poverty increases with respect to children in the household. Government should introduce family planning methods to lower the fertility rate and in this way the family size would be smaller which increases the chance of a pupil to pass all the levels of schooling.

Pupil's sex is one of the factors that lead to the dropout of school for female pupils. The regional effect brings out that primary school dropout is mainly lower in urban areas than rural areas. The higher dropout rates for females' primary level of education could also be the outcome of cultural and social norms forced by wealthy as well as poor; however, traditionalist parents in urban and rural residents. The government raises any valuable awareness programs of education or to give schools and inducements for the female pupils from poor households to progress schooling.

Marital status was found to be the main cause of pupil school progression. Conversely, this means pupils that their parents are divorced or separated have higher probability of dropping out. Therefore, these children need to be cared and given them to caring shelters.

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Primary school distance shows that a pupil going to a distant primary school has a probability of dropping out of school, but at 10 percent alpha value it is not significant. Long distances could not be travelled by young children and parents are less willing to send their children to school in the absence of an adequate transportation system. Another factor in low attendance rates and higher dropout rates is the lack of schools in rural areas and large distances from such schools. School busses are familiar in industrialized countries and therefore school distance is usually not a factor in higher dropout, but in rural areas of Somaliland there is no such busing system. Likewise, the government does not provide buses in urban areas to take pupils to and from school, and private hires make urban commuting expensive and out of reach for a number of poorer households with negative drop-out effects. Especially in rural areas where the pupils travel an average of 4 km to school, the government should build more schools.

Higher-income households add more weight to the pupil's school progress as they are able to pay schooling costs. Therefore, the likelihood of pupils from such households continuing schooling is high. The availability of incentives and subsidies for school going on as well as the provision of public schools in rural areas will certainly reduce the negative impact of poverty on rural schooling. As parents continue to alternate child labor for their children's education, educational policies will be unsuccessful, but this can be eliminated by providing subsidies to the poorer parts of the society. There is a significant association between pupils' progression of primary schooling and the literacy of the parents; pupils with literate parents have lower probability to drop out from school indifferent to their residential because of the positive perception of the literate parents' education. Policies to raise literacy levels should be pursued. This could be done by strengthening adult literacy programs in rural and urban areas of Somaliland.

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APPENDIX



Appendix 1: Model estimates of primary school dropout in Somaliland

S3_AC09	Odds ratio	Std error	Z	P> z	95% of CI	
maritalstatus	1.458	1.253	0.440	0.061	0.271	7.860
Sex2	1.282	0.847	0.380	0.007	0.351	4.680
S13_G11_6	1.019	0.015	1.240	0.014	0.989	1.049
S1_HHSIZE	0.750	0.114	-1.900	0.028	0.557	1.009
S3_AE21A	-1.214	0.001	-0.060	0.034	0.998	1.002
Parent	-1.590	0.632	-0.490	0.016	0.072	4.817
_cons	1.057	1.326	0.040	0.000	0.091	12.341
Number of observations = 87						
Likelihood ratio chi square (6) = 7.41						
Probability > chi square = 0.001						
Logarithm likelihood = -36.12				Pseudo R squared = 0.1901		

Source: (Author's calculation)

Appendix 2: Model estimates of primary school dropout in urban areas

Udrop	Odds ratio	Std error	Z	P> z	95% of CI	
maritalstatus	0.962	1.205	0.230	0.149	0.171	0.431
Sex2	1.021	1.631	0.504	0.006	0.822	3.850
S13_G11_6	1.109	0.724	1.070	0.251	0.679	1.052
S1_HHSIZE	0.563	2.001	-1.008	0.028	0.714	1.059
S3_AE21A	-1.140	0.341	1.090	0.005	2.416	7.104
Parent	-1.307	1.931	0.740	0.031	1.48	5.330
_cons	1.282	0.143	0.471	0.000	0.181	2.521
Number of observations = 31						
Likelihood ratio chi square(6) = 6.01						
Probability > chi square = 0.022						
Logarithm likelihood = - 23.28				Pseudo R squared = 0.135		

Source: Author's calculation

Appendix 3: Model estimates of primary school dropout in rural areas

Rdrop	Odds ratio	Std error	Z	P> z	95% of CI	
maritalstatus	1.023	1.050	0.310	0.055	0.188	4.541
Sex2	0.889	1.055	0.260	0.039	0.622	1.091
S13_G11_6	1.220	0.224	1.001	0.005	0.687	1.009
S1_HHSIZE	1.112	0.631	-1.450	0.001	0.347	1.807
S3_AE21A	-0.751	1.473	-0.290	0.002	0.878	1.351
Parent	-1.554	0.428	-0.446	0.007	0.147	3.114
_cons	1.028	1.033	0.022	0.000	0.191	9.223
Number of observations =46						
Likelihood ratio chi square (6) = 6.51						
Probability > chi square = 0.020						
Logarithm likelihood = -28.23				Pseudo R squared = 0.161		

Source: Author's calculation