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REDUCING THE COST OF OPERATION FOR ENTREPRENEURS IN AKWA IBOM STATE BY ADDRESSING POWER SUPPLY CHALLENGES

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Abstract: Access to reliable electricity is crucial for the success of entrepreneurial businesses. This study explores the impact of power failure on entrepreneurial behavior in Akwa Ibom State, Nigeria, with a focus on Uyo metropolis. Despite previous research on the topic, there is limited research on power failure and entrepreneurial behavior in Akwa Ibom State. Using a descriptive design, the experiences of 120 entrepreneurs across various business sectors were examined. The findings revealed frequent power failures, which affected the daily operation of their businesses, damaging machineries, leading to constant repairs, replacement, loss of patronage and impeding the growth of their businesses. Moreover, power outages hindered the start of the daily operation of entrepreneurial activities. The research highlights the need for policymakers and stakeholders to address the issue of reliable electricity supply to drive business growth and development. Recommendations were provided for the government to take more actions to address power supply challenges to boost businesses and reduce high costs of operation for entrepreneurs.

Keywords: Power Failure, Power Outage, Low Voltage, High Voltage, Entrepreneurial Behaviour, Akwa Ibom State.

Introduction:

Reliable electricity plays a vital role in the successful operation of entrepreneurial businesses. However, the problem of insufficient and unreliable power supply continues to hinder business activities in Nigeria. Despite the efforts put in by the government over the years to address the issue, research indicates that it remains a problem, particularly for entrepreneurs. This study focuses on power failure and entrepreneurial behavior in Akwa Ibom State, Nigeria, with a focus on Uyo metropolis.

While several studies have examined power failure and its effects on businesses globally, none has focused specifically on Akwa Ibom State. This study seeks to fill this research gap by exploring the experiences of entrepreneurs in various business sectors and their encounters with power failure. The study will

provide insights for policymakers and stakeholders for targeted interventions to boost entrepreneurship in the state. This study uses a descriptive design. A structured questionnaire was administered to 120 entrepreneurs across various business sectors in Uyo metropolis. The data gathered were analyzed using descriptive statistics. The

study examines the impact of power failure, including power outage, high voltage, and low voltage, on the entrepreneurial behavior of entrepreneurs in Uyo metropolis.

The findings of this study will contribute to existing literature on the relationship between power failure and entrepreneurial behavior and provide insights for policymakers and stakeholders on the need to address the issue of reliable electricity supply for business growth and development in Akwa Ibom State.

Power Failure

A power failure is a period of time when there is no electricity supply (Longman Dictionary of Contemporary English, 2023) or the supply is interrupted (Collins Dictionary, 2023). It is also known as power cut (Macmillan Dictionary, 2023), power outage, power loss or blackout (Wikipedia, 2023). Power failure is the total loss of power to an area and is the most severe form of power outage that can occur (Ajanaku & Alade, 2007). Power failure affects both developed and developing countries but developing countries turn out to be more affected by insufficient provision of electricity power and within these countries, businesses appear to suffer the most (Lee & Anas, 1992; Steel & Webster, 1991). Poor electricity supply in Nigeria and in fact the rest of Africa has posed the greatest challenges to productivity, investment growth and competitiveness (ADB, 2009). Akinbola et al. (2017) observed that epileptic power supply is the greatest obstacle to the achievement of efficient business operation. Nwanakwere and Uzoeto (2020) in their study found that insufficient electricity supply had a serious impact on Small and Medium Enterprises (SMEs) in the country with SMEs subjected to about 11.6 hours of power cuts daily. He posited that businesses lose 15.6 times the annual sales owing to the low power supply. Esscribano et al. (2009) found that epileptic power supply has a significant negative impact on business enterprises and that poor quality electricity supply is the infrastructure element that has the strongest negative effect on enterprise productivity. Arnold et al. (2008) confirmed that unreliable electricity supply has a significant negative impact on entrepreneurial growth. Power failure can occur in three dimensions being outright power outage, high voltage and low voltage. **Power Outage**

Techopedia (2023) defines power outage as a short- or long-term state of electric power loss in a given area or section of a power grid. Power outage refers to a complete loss of power, lasting from one second to hours (Lineweber & McNulty, 2001). The extent of power outages can be measured by their frequency, duration, or firm's self-assessment of the severity of the issue or the associated losses (ibid). Power outage can affect business activities in several ways leading to negative effects on productivity. Continuous power outage can cause lower output level, malfunctioning of equipment and machineries leading to high cost of repairs and replacements, high cost of spoiled inventories and spoiled finished products due to the interruptions in power during the production process, uncertainties and loss of patronage (Jyoti et al., 2006). Power outage has become the norm in Nigeria. In fact, in 2004, major manufacturing firms experienced 316 outages; this increased by 26% in 2005, followed by an explosive 43% increase between 2006 and 2007 (Iwayemi, 2008). Due to the incessant power supply challenges, in 2005, the government promulgated a reform of the industry by opening the sector for private investment especially in the generation segment of the market (FGN, 2010).

The reform however failed to enhance the quantum and reliability of power supply in Nigeria, resulting in the frequent power supply failure that has made electric power supply to be very unreliable and inadequate (Gries & Naude, 2010). Moyo (2012) found that in Nigeria, power outage had a negative and significant effect on firms' growth, firms' productivity and also led to low patronage especially in small firms. Power outage duration appeared to have a positive and significant effect on firms' productivity as measured by cost and technical efficiency scores, but also negative effect on scale efficiency (LaCommare & Eto, 2004).

High Voltage

High voltage or voltage transients are referred to as spikes, surges, or impulses as they last less than a millisecond and have a magnitude of a thousand volts or more (Matsukawa & Fuji, 2004). Voltage transients can quickly destroy sensitive electronic equipment used in businesses. It can shorten electrical equipment insulation life or result in immediate failure leading to high cost of frequent repairs and replacement (LaCommare & Eto, 2004).

Low Voltage

Low voltage or under voltages are more common than high voltages and are caused by a variety of things including the utility supply and overloaded circuits (Adenikinju, 2005). Prolonged under voltage conditions can seriously damage machineries, affect manufacturing work in process leading to loss of production, manufacturing interruptions, loss of revenue, decreased competitiveness, lost opportunities, product damage and wasted energy with decreased equipment life (Gokgur & Jones, 2006). **Entrepreneurial Behaviours**

Entrepreneurial behaviour can be defined as a set of behaviours that an individual exhibits which allows them to innovate and/or improve upon existing ideas to market a product or service effectively in a competitive market (Stockley, 2021). Entrepreneurial behaviour is defined as identifying possibilities and putting good ideas into action (Wang et al., 2022).

Entrepreneurial behaviour is the capacity of the individuals to spot opportunities in the market and to turn them into profitable businesses (Franca et al., 2021). Entrepreneurial behaviour is referred to as new venture creation, firm birth or start up (Brownson, 2014a; Brownson, 2015,). It is also viewed as entrepreneurial actions, that is, activities carried out by entrepreneurs in their business ventures (Brownson, 2014b). Akinbola et al. (2017) identified epileptic electricity supply as the greatest obstacle to the achievement of efficient operation in the business sector. Small businesses are highly affected by unreliable electricity; however, evidence on the impact of unreliable electricity on small businesses remain scanty. Moyo's (2012) study found that power outages variables have a negative and significant effect on the growth of firms. Power outages duration have a positive and significant effect on firms' productivity as measured by cost and technical efficiency scores. Sabbarwal (2010) found that getting electricity connections poses maximum problems for business community entrepreneurs. Evidence supports a positive and direct association between new venture creation and electricity access (Vernet et al., 2019). A study reported electricity access was without effect on new venture creation (Aklin et al., 2017). There are reported positive evidence of the effect of electricity on firms' formation. New enterprises emerge in electricity connected communities (Ghogomu, 2020).

METHODS

Using a descriptive design, 120 entrepreneurs in various business sectors as shown on Table 1 in Uyo metropolis were purposively examined through a structured questionnaire and the results are shown in the analysis below:

Table 1: Nature of the Businesses of the Respondents

Nature of the Business	Frequency of Responses	Percentage
Production	25	20.8
Direct/indirect services	43	35.8
Sales	29	24.2
Others	23	19.2
Total	120	100

Table 1 above shows the nature of businesses carried out by the respondents. Twenty-five (25) responses, representing 20.8% of the respondents, were in production; 43 respondents, representing 35.8% of the responses, were in direct and indirect services; while 29 respondents, representing 24.2% of the responses, were in sales business with 23 respondents, representing 19.2% of the responses, engaging in other forms of businesses.

ANALYSIS

The aim of this paper is to examine power failure and entrepreneurial behaviour of entrepreneurs in Uyo metropolis of Akwa Ibom State. The tables below show the analysis of the study:

Table 2: Power Outage and Entrepreneurial Behaviour

S/N	Questions	SA	A	D	SD	TOTAL
1	We experience frequent power outage in our business	50 (42%)	42 (35%)	12 (10%)	16 (13%)	120 (100%)
2	Power outage hinders the start of the daily operation of our business activities	60 (50%)	40 (33%)	15 (13%)	5 (4%)	120 (100%)
3	Power outage hinders the daily operation of our business activities	57 (47%)	35 (29%)	14 (11%)	16 (13%)	120 (100%)
4	Power outage disrupts our production process	48 (40%)	48 (40%)	12 (10%)	12 (10%)	120 (100%)
5	Power outage causes low patronage of our business	35 (29.2%)	40 (33.3%)	22 (18.3%)	23 (19.2%)	120 (100%)
6	Power outage affects the growth of our business	46 (38.3%)	41 (34.2%)	16 (13.3%)	17 (14.2%)	120 (100%)

Table 2 above shows the responses of respondents on power outage and their entrepreneurial behaviour. Statement 1 on the table shows that 50 respondents, representing 42% of the responses, strongly agreed to the fact that power outage is a frequent event that they experience in the cause of carrying out their entrepreneurial activities. Forty-two (42) respondents, indicating 35% of the responses, agreed to experiencing frequent power outage with 12 respondents (representing 10% of the responses) and 16 respondents (representing 13% of the

responses) disagreeing and strongly disagreeing to experiencing frequent power outage during their business operation respectively. Given the majority of those who agreed (a total of 79% for strongly agreed and agreed) against those who disagreed (a total of 23% for those who disagreed and strongly disagreed), it can be deduced that power outage to a large extent does occur frequently to disrupt the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour.

Statement 2 on Table 2 shows that 60 respondents, representing 50% of the responses, strongly agreed to the fact that power outage hinders the start of the daily operation of their business activities. Forty (40) respondents, indicating 33% of the responses, agreed to power outage hindering the start of the daily operation of their businesses with 15 respondents (representing 13% of the responses) and 5 respondents (representing 4% of the responses) disagreeing and strongly disagreeing to power outage hindering the start of the daily operation of their business activities respectively. Given the majority of those who agreed (a total of 83% for strongly agreed and agreed) against those who disagreed (a total of 17% for those who disagreed and strongly disagreed), it can be deduced that power outage to a large extent does hinder the start of the daily operation of the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour.

Statement 3 on Table 2 shows that 57 respondents, representing 47% of the responses, strongly agreed to the fact that power outage hinders the daily operation of their business activities. Thirty-five (35) respondents, indicating 29% of the responses, agreed to power outage hindering the daily operation of their businesses with 14 respondents (representing 11% of the responses) and 16 respondents (representing 13% of the responses) disagreeing and strongly disagreeing to power outage hindering the daily operation of their business activities respectively. Given the majority of those who agreed (a total of 76% for strongly agreed and agreed) against those who disagreed (a total of 24% for those who disagreed and strongly disagreed), it can be implied that power outage to a large extent does hinder the daily operation of the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour.

Statement 4 on Table 2 shows that 48 respondents, representing 40% of the responses, strongly agreed to the fact that power outage disrupts production process of their business activities. Similarly, 48 respondents, indicating 40% of the responses, agreed to power outage disrupting the production process of their businesses with 12 respondents (representing 10% of the responses) and 12 respondents (representing 10% of the responses) disagreeing and strongly disagreeing to power outage disrupting the production process of their business activities respectively. Taking into account the majority of those who agreed (a total of 80% for strongly agreed and agreed) against those who disagreed (a total of 20% for those who disagreed and strongly disagreed), it can be interpreted that power outage to a large extent does disrupt the production process of the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour. Statement 5 on Table 2 shows that 35 respondents, representing 29.2% of the responses, strongly agreed to the fact that power outage does cause low patronage of their business activities. Forty (40) respondents, indicating 33.3% of the responses, agreed to power outage causing low patronage of their businesses with 22 respondents (representing 18.3% of the responses) and 23 respondents (representing 19.2% of the responses) disagreeing and strongly disagreeing to power outage causing low patronage of their business activities respectively. In view of the majority of those who agreed (a total of 62.5% for strongly agreed and agreed) against those who disagreed (a total of 37.5% for those who disagreed and strongly disagreed), it can be understood that power outage to a moderate extent does cause low patronage of the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour.

Statement 6 on Table 2 shows that 46 respondents, representing 38.3% of the responses, strongly agreed to the fact that power outage affects the growth of their businesses. Forty-one (41) respondents, indicating 34.2% of the responses, agreed to power outage affecting the growth of their businesses with 16 respondents (representing 13.3% of the responses) and 17 respondents (representing 14.2% of the responses) disagreeing and strongly disagreeing to power outage affecting the growth of their businesses respectively. Taking into consideration the majority of those who agreed (a total of 72.5% for strongly agreed and agreed) against those who disagreed (a total of 27.5% for those who disagreed and strongly disagreed), it can be understood that power outage to a large extent does affect the growth of the entrepreneurial activities of entrepreneurs in Uyo metropolis which does affect their entrepreneurial behaviour.

On the whole, the analysis of Table 2 indicates that power outage does to a major extent affect the entrepreneurial behaviour of entrepreneurs in Uyo metropolis given its effect on the start of the daily operation of the business, hindering daily business activities, disrupting production process, causing low patronage and impeding the growth of their businesses.

Table 3: High Power Voltage and Entrepreneurial Behaviour

S/N	Questions	SA	A	D	SD	TOTAL
1	We experience frequent highpower voltage in our business	25 (21%)	20 (17%)	35 (29%)	40 (33%)	120 (100%)
2	High power voltage damages our business equipment	47 (39.2%)	41 (34.2%)	14 (11.6%)	18 (15%)	120 (100%)
3	High power voltage shortens the lifespan of our business equipment	45 (38%)	35 (29%)	18 (15%).	22 (18%)	120 (100%)
4	Due to high power voltage, we are constantly repairing our business equipment	34 (28.3%)	39 (32.5%)	23 (19.2%)	24 (20%)	120 (100%)
5	Due to high power voltage, we are constantly replacing our business equipment	33 (27.5%)	35 (29.2%)	24 (20%)	28 (23.3%)	120 (100%)
6	Due to high power voltage, we cannot consider starting up other business	23 (19.2%)	19 (15.8%)	38 (31.7%)	40 (33.3%)	120 (100%)

Table 3 above shows the responses of respondents on high voltage and entrepreneurial behaviour of entrepreneurs in Uyo metropolis. Statement 1 on Table 3 above shows that 25 respondents, representing 20% of the responses, strongly agreed that they do experience frequent high-power voltage in their businesses from the power grid. Twenty (20) respondents, representing 17% of the responses, agreed to experiencing high power voltage in their business while 35 respondents (representing 29% of the responses) and 40 respondents (representing 33% of the responses) disagreed and strongly disagreed respectively to experiencing high power voltage in their businesses from the power grid. The results show that majority of the respondents do not experience high power voltage from the power grid as indicated by the high percentage of those who disagreed (a total of 62% disagreed and strongly disagreed) compared with those who agreed (a total of 38% strongly

agreed and agreed). This implies that though high-power voltage exists, it does not occur frequently in Uyo metropolis.

Statement 2 on Table 3 above shows that 47 respondents, representing 39.2% of the responses, strongly agreed that high power voltage damages their business equipment. Forty-one (41) respondents, representing 34.2% of the responses, agreed that high power voltage damages their business equipment while 14 respondents (representing 11.6% of the responses) and 18 respondents (representing 15% of the responses) disagreed and strongly disagreed respectively to high power voltage damaging their business equipment. This implies that high power voltage when it occurs does to a large extent damage the business equipment of the entrepreneurs as indicated by the high percentage of those who agreed (a total of 73.4% agreed and strongly agreed) compared with those who disagreed (a total of 26.6% strongly disagreed and disagreed).

Statement 3 on Table 3 above shows that 45 respondents, representing 38% of the responses, strongly agreed that high power voltage shortens the life span of their business equipment. Thirty-five (35) respondents, representing 29% of the responses, agreed that high power voltage shortens the life span of their business equipment while 18 respondents (representing 15% of the responses) and 22 respondents (representing 18% of the responses) disagreed and strongly disagreed respectively to high power voltage shortening the life span of their business equipment. This implies that high power voltage when it occurs does to a moderate extent shorten the life span of the business equipment of the entrepreneurs as indicated by the high percentage of those who agreed (a total of 67% agreed and strongly agreed) compared with those who disagreed (a total of 33% strongly disagreed and disagreed).

Statement 4 on Table 3 above shows that 34 respondents, representing 28.3% of the responses, strongly agreed that due to high power voltage, they are constantly repairing their business equipment. Thirty-nine (39) respondents, representing 32.5% of the responses, agreed that due to high voltage damage, they are constantly repairing their business equipment while 23 respondents (representing 19.2% of the responses) and 24 respondents (representing 20% of the responses) disagreed and strongly disagreed respectively to high power voltage leading to a constant repair of their business equipment. This implies that high power voltage when it occurs does to a moderate extent cause damage that leads to a constant repair of the business equipment of the entrepreneurs as indicated by the high percentage of those who agreed (a total of 60.8% agreed and strongly agreed) compared with those who disagreed (a total of 39.2% strongly disagreed and disagreed) with the statement.

Statement 5 on Table 3 above shows that 33 respondents, representing 27.5% of the responses, strongly agreed that due to high power voltage, they are constantly replacing their business equipment. Thirty-five (35) respondents, representing 29.2% of the responses, agreed that they constantly replace their business equipment due to high power voltage while 24 respondents (representing 20% of the responses) and 28 respondents (representing 23.3% of the responses) disagreed and strongly disagreed respectively to high power voltage causing a constant replacement of their business equipment. This implies that high power voltage when it occurs does to a slight extent cause a constant replacement of the business equipment of the entrepreneurs as indicated by the minimal increase in the percentage of those who agreed (a total of 56.7% agreed and strongly agreed) compared with those who disagreed (a total of 43.3% strongly disagreed and disagreed) with the statement.

Statement 6 on Table 3 above shows that 23 respondents, representing 19.2% of the responses, strongly agreed that due to high power voltage, they cannot consider starting up other businesses. Nineteen (19) respondents, representing 15.8% of the responses, agreed that high power voltage limits their ability to start up new

businesses while 38 respondents (representing 31.7% of the responses) and 40 respondents (representing 33.3% of the responses) disagreed and strongly disagreed respectively to high power voltage limiting their ability to start up new businesses. This implies that high power voltage when it occurs does not to a moderate extent hinder the entrepreneur from considering starting up other ventures as indicated by the high percentage of those who disagreed (a total of 65% disagreed and strongly disagreed) compared with those who agreed (a total of 35% strongly agreed and agreed) with the statement.

On the whole, the analysis of Table 3 indicates that high power voltage does not to a large extent occur frequently in Uyo metropolis but that when it does occur, it does to a large extent damage business equipment of entrepreneurs but to a moderate extent shorten the life span of those equipment leading to a constant repair or outright replacing of such equipment. However, the result did indicate that high power voltage does not hinder most entrepreneurs from considering starting up other new ventures.

Table 4: Low Power Voltage and Entrepreneurial Behaviour

S/N	Questions	SA	A	D	SD	TOTAL
1	We experience frequent low power voltage in our business	24 (20%)	21 (17.5%)	40 (33.3%)	35 (29.2%)	120 (100%)
2	Low power voltage damage some of our business equipment	45 (37.5%)	39 (32.5%)	16 (13.3%)	20 (16.7%)	120 (100%)
3	Low power voltage shortens the lifespan of our business equipment	43 (35.8%)	38 (31.7%)	20 (16.7%)	19 (15.8%)	120 (100%)
4	Due to Low power voltage, we are constantly repairing our business equipment	42 (35%)	37 (31%)	22 (18%)	19 (16%)	120 (100%)
5	Low power voltage disrupts our production process	36 (30%)	30 (25%)	30 (25%)	24 (20%)	120 (100%)
6	Low power voltage causes low patronage of our business	45 (37.5%)	35 (29.2%)	18 (15%).	22 (18.3%)	120 (100%)
7	Due to low power voltage, we cannot consider starting up other business	38 (31.7%)	35 (29.2%)	22 (18.3%)	25 (20.8%)	120 (100%)

Table 4 shows the analysis on low power voltage and entrepreneurial behaviour of entrepreneurs in Uyo metropolis. Statement 1 shows that 24 respondents, representing 20% of responses, strongly agreed that they experience frequent low power voltage from the power grid in their businesses. Twenty-one (21) respondents (representing 17.5% of the responses) agreed to the question while 40 (representing 33.3% of the responses) and 35 (representing 29.2% of the responses) respondents disagreed and strongly disagreed respectively to experiencing frequent low power voltage in their businesses. This implies that low power voltage does not occur frequently in Uyo metropolis as indicated by the high percentage (a total of 62.5% strongly disagreed and disagreed) of those who disagreed to experiencing low power voltage compared to (a total of 37.5 strongly agreed and agreed) those who agreed to it.

Statement 2 shows that 45 respondents (representing 37.5% of the responses) strongly agreed to low power voltage damaging some of their business equipment along with 39 respondents (representing 32.5% of the

responses) agreeing to it as well. Sixteen (16) respondents (representing 13.3% of the responses) disagreed along with 20 respondents (representing 16.7% of the responses) strongly disagreeing as well that low power voltage damages some of their business equipment. This implies that although low power voltage occurs less frequently, it does damage some of the equipment of the entrepreneurs in Uyo metropolis when it occurs. Statement 3 shows that 43 respondents (representing 35.8% of the responses) strongly agreed to low power voltage shortening the life span of some of their business equipment along with
38 respondents (representing 31.7% of the responses) agreeing to it as well. Twenty (20) respondents (representing 16.7% of the responses) disagreed along with 19 respondents (representing 15.8% of the responses) strongly disagreeing as well that low power voltage shortens the lifespan of their business equipment. This implies that although low power voltage occurs less frequently, it does shorten the lifespan of the equipment of the entrepreneurs in Uyo metropolis when it occurs.

Statement 4 shows that 42 respondents (representing 35% of the responses) strongly agreed to low power voltage causing them to constantly repair their business equipment along with 37 respondents (representing 31% of the responses) agreeing to it as well. Twenty-two (22) respondents (representing 18% of the responses) disagreed along with 19 respondents (representing 16% of the responses) strongly disagreeing as well that low power voltage cause a constant repair of their business equipment. This implies that although low power voltage occurs less frequently, it does to a moderate extent cause damages that lead to constant repairs on some of the equipment of the entrepreneurs in Uyo metropolis when it occurs.

Statement 5 shows that 36 respondents (representing 30% of the responses) strongly agreed that low power voltage disrupt the production process of their businesses along with 30 respondents (representing 25% of the responses) who also agreed to the statement as well. Thirty (30) respondents (representing 25% of the responses) disagreed with statement 5 along with 24 respondents (representing 20% of the responses) strongly disagreeing to the statement that low power voltage disrupts the production process of their businesses. This implies that although low power voltage occurs less frequently, it does to a moderate extent disrupt the production process of the businesses of the entrepreneurs in Uyo metropolis when it occurs.

Statement 6 shows that 45 respondents (representing 37.5% of the responses) strongly agreed that low power voltage causes low patronage of their businesses, along with 35 respondents (representing 29.2% of the responses) who also agreed to the statement as well. Eighteen (18) respondents (representing 15% of the responses) disagreed with statement 6 along with 22 respondents (representing 18.3% of the responses) strongly disagreeing to the statement that low power voltage causes low patronage of their businesses. This implies that although low power voltage occurs less frequently, it does to a moderate extent cause low patronage of the businesses of the entrepreneurs in Uyo metropolis when it occurs.

Statement 7 shows that 38 respondents (representing 31.7% of the responses) strongly agreed to the statement that ‘due to low power voltage, they cannot consider starting up other businesses along with 35 respondents (representing 29.2% of the responses) who also agreed to the statement as well. Twenty-two (22) respondents (representing 18.3% of the responses) disagreed with statement 7 along with 25 respondents (representing 20.8% of the responses) strongly disagreeing to the statement that due to low power voltage, they cannot consider starting up new businesses. This implies that, although low power voltage occurs less frequently, it does to a moderate extent hinder the entrepreneurs in Uyo metropolis from considering starting any other business when it occurs.

On the whole, the analysis of Table 4 indicates that low voltage to a large extent does not occur frequently in Uyo metropolis but that when it does occur, it does to a moderate extent damage business equipment of

entrepreneurs, shorten the life span of those equipment leading to a constant repair of such equipment as well as hindering most entrepreneurs from considering starting up other new ventures.

DISCUSSION OF FINDINGS

This study sought to examine power failure and entrepreneurial behaviour of entrepreneurs in Uyo metropolis of Akwa Ibom State in Nigeria. Power failure was broken down into measures such as power outage, high voltage and low voltage while entrepreneurial behaviour embodied the actions and activities of the entrepreneurs in the operation of their business activities and possibilities of starting up new ventures. The result of the analysis is discussed below:

Power Outage and Entrepreneurial Behaviour: The result revealed that power outage occurs frequently in Uyo metropolis [given the high percentage of agreement (total of 79% for strongly agreed and agreed) compared with the low level of disagreement (total of 23% for those who disagreed and strongly disagreed)] and that when it occurs, it does affect entrepreneurial behaviour of entrepreneurs by hindering the start of the daily operation of their businesses, obstructing daily business activities, disrupting production process, causing low patronage and impeding the growth of their businesses. The findings of this study align with the study of Iwayemi (2008) and Gries and Naude (2010) who affirmed the unreliable and inadequate nature of power supply in Nigeria. The result supports the findings of Akinbola et al. (2017) who found that power outage is the greatest obstacle to the achievement of efficient business operations as it interrupts the production process (Jyoti et al., 2006) and leads to loss of sales (Nwanakwere & Uzoeto, 2020) and low patronage (Jyoti et al., 2006; Moyo, 2012). The finding however contradicts the study of Arnold et al. (2008) and Moyo (2012) who found a negative and significant effect of power outage on firms' growth.

High Power Voltage and Entrepreneurial Behaviour: The result revealed that high power voltage does not occur frequently in Uyo metropolis [given the high percentage of disagreement (a total of 62% disagreed and strongly disagreed) compared with the low percentage level of those who agreed (a total of 38% strongly agreed and agreed)] but that when it does occur, it damages business equipment of entrepreneurs, shortens the lifespan of those equipment leading to a constant repair or outright replacing of such equipment. However, the result did indicate that high power voltage does not hinder most entrepreneurs from considering starting up other new ventures. The result of this study contradicts Akuru and Okoro (2014) who asserted that high power voltage is a frequent occurrence in Nigeria. The result supports the findings of LaCommare and Eto (2004) that high power voltage destroys business equipment and shortens the lifespan of such equipment leading to frequent repairs and replacement. The result also supports the findings of Vernet et al. (2019) and Ghogomu (2020) regarding the positive effect of electricity access with new venture creation in that despite the power outage and less frequent high power voltage experienced by the entrepreneurs in Uyo metropolis, it does not deter them [given the high percentage of those who disagreed to statement 6 of Table 3 (a total of 65% disagreed and strongly disagreed) compared with those who agreed (a total of 35% strongly agreed and agreed)] from considering starting up other businesses.

Low Power Voltage and Entrepreneurial Behaviour: The result revealed that low power voltage does not occur frequently in Uyo metropolis but that when it does occur, it damages business equipment of entrepreneurs, shortens the lifespan of those equipment leading to a constant repair of such equipment as well as hindering most entrepreneurs from considering starting up other new ventures. The findings align with the study of Gokgur and Jones (2006) that low power voltage can seriously damage machineries, lead to loss of production and loss of revenue, and decrease the lifespan of business equipment. The study contradicts Akuru and Okoro (2014) who asserted that low power voltage frequently occurs in the country. It also contradicts

the findings of Vernet et al. (2019) and Ghogomu (2020) on new firm formation in that, though low power voltage occurs less frequently, it can hinder most entrepreneurs from considering starting up other businesses as compared with the high percentage of those who agreed (a total of 60.9% strongly agreed and agreed) on statement 7 of Table 4 against those who disagreed (a total of 39.1% disagreed and strongly disagreed).

CONCLUSION

The aim of this study was to examine power failure and entrepreneurial behaviour of entrepreneurs in Uyo metropolis of Akwa Ibom State in Nigeria. The analysis of the investigation revealed that power failure does to a large extent affect the entrepreneurial behaviour of entrepreneurs in Uyo metropolis. The study revealed that power failure in terms of power outage occurs frequently to a large extent, hinders the start and daily activities of the entrepreneurs' business, disrupts production process, causes low patronage and impedes the growth of their business. The study did reveal that power failure in terms of high power voltage though does not occur frequently but it does to a moderate extent damage the equipment of the entrepreneurs, shorten the lifespan of such equipment leading to excessive repairs or outright replacement, but does not deter majority of the entrepreneurs from considering starting up other businesses. The study also revealed that power failure in terms of low power voltage affects entrepreneurial behaviour in that, even though the entrepreneurs do not experience frequent low power voltage, the low power voltage when it does occur to a moderate extent damages their business equipment and shortens the lifespan of their equipment leading to constant repairs.

The result showed that majority of entrepreneurs are unlikely to consider starting up other businesses given a situation of low power voltage occurring. The findings of this study add new knowledge to the entrepreneurship literature given the scanty findings of power failure and entrepreneurial behaviour especially as its concerns the context of the study. The study recommends that there is a need for the government to address the issue of power outage which has grave effects on entrepreneurial behaviour and ensure that electricity supply from the national grid is reliable with the right voltage supply to avoid the damage done to the business equipment of entrepreneurs due to high and low voltage. This will encourage more venture creation among the entrepreneurs for better job generation and reduce the high cost of business output due to high cost associated with sourcing for privately owned alternative power source.

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