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## ENTREPRENEURIAL ORIENTATION AND MEDICATION THERAPY MANAGEMENT SERVICES DELIVERY OF COMMUNITY PHARMACIES IN RIVERS STATE, NIGERIA.

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### ABSTRACT

**Purpose:** This study examined the relationship between entrepreneurial orientation and medication therapy management services delivery of community pharmacies in Rivers State, Nigeria.

**Methodology:** Correlational research design was adopted for the study using the survey method. All community pharmacies in Rivers State registered with the Pharmacists Council of Nigerian (PCN) constituted the population of the study and the study had a population of 462 from which a sample size of 214 community pharmacies was determined. The sampling unit of the study were superintendent pharmacists of the community pharmacies. Primary data were collected using a well-structured questionnaire whose reliability tested on the Cronbach Alpha scale using SPSS version 24.0 was 0.810. Regression analysis was used to test the hypotheses.

**Results:** The findings of the study showed that there was a positive and significant relationship between risk taking propensity and medication therapy management services delivery of community pharmacies in Rivers State, Nigeria with R value of 0.915 at  $p < 0.05$ . The correlation between proactiveness and the delivery of medication therapy management was positive and significant with R value of 0.894 at  $p$ -value  $< 0.05$  while the correlation between innovativeness and competitive aggressiveness and medication therapy management services delivery was also positive and significant with R values of 0.899 and 0.916 respectively at  $p$ -values  $< 0.05$ .

**Conclusion:** Based on the research findings, the study thus concluded that entrepreneurial orientation (risk-taking propensity, pro-activeness, innovativeness, and competitive aggressiveness) can be considered a potent factor in the sustained delivery of medication therapy management services of community pharmacies.

**Recommendation:** The study recommended amongst others that Community pharmacies/pharmacists in Rivers State should improve in their innovativeness by delivering quality cognitive services.

**Keywords:** *Entrepreneurial orientation; Medication therapy management; Innovativeness; Competitive aggressiveness and Proactiveness.*

## INTRODUCTION

Business enterprises in their diverse forms ranging from micro, small, medium, or large, have become important sources of job, wealth, and capital creation. Hence, to ensure sustainability of these enterprises, owners or managers should have entrepreneurial awareness to efficiently deliver on services that are desired by customers /consumers. Within the context of global healthcare system which has evolved in the past two decades, there is a paradigm shift in the role of pharmacists from the traditional dispensing focus to a service-oriented approach that is patient centered. This shift requires pharmacists to develop new skills and provide new services because they are seen as managers of these enterprises. The turbulence that disrupts the business environment rendering it unstable places a huge demand on pharmacy managers to act entrepreneurially; as he/she fulfills the demanding role of enhancing performance/service delivery contingent on the ever-changing environment (Jolaosho, 2017; Peris, 2019).

Community pharmacy businesses are professional ventures which range in scope from micro, small to medium scale enterprises which if well-managed could significantly reduce unemployment, create wealth and to a great extent, improve the health of any nation. Small and medium enterprises usually make up a majority (up to 90%) of enterprises, and their contribution to economic growth, job creation and innovation has been widely recognized (Asieba & Nmadu, 2018). Community pharmacies are an interesting study to explore because of the relationship between the professional and business aspects of the practice. Community pharmacists must strive to ensure a balance between their professional and commercial obligations by providing skilled services in the form of compounding and dispensing of medications, while also selling/distributing commodities for profit. Within the spectrum of healthcare professionals globally, pharmacists are unarguably the most involved in entrepreneurship. Pharmacy is a dual market industry because a pharmacy must combine its traditional medications compounding and dispensing roles with efficient delivery of professional services.

Entrepreneurship and entrepreneurial orientation are two constructs that are inseparable. Entrepreneurial orientation has its roots in strategy making process literature (Covin & Lumpkin, 2011). The construct, as it is commonly defined today, was discussed by Wiklund (2006) who described an entrepreneurial organization as one that engages in product market innovation, undertakes somewhat risky ventures and is first to come up with proactive innovations, beating competitors to the punch. This lends credence to the multi-dimensional nature of the concept. According to Wiklund (2006), an organization shows entrepreneurial orientation when these dimensions are simultaneously present within an organization. Lumpkin and Dess (1996) avers that the term entrepreneurial orientation refers to strategy making process and styles of firms that engage in entrepreneurial activities including autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness. Entrepreneurial orientation involves a readiness to introduce new market offerings, involve risky undertakings to try out new and uncertain products, services and market and be more proactive than competitors toward new marketplace opportunities (Adeyemi & Aremu, 2011). It has also been conceptualized as the process and decision-making activities used by entrepreneurs that lead to entry and support of business activities and as the strategy making processes that provide organizations with a basis for entrepreneurial decision and actions (Mwangi & Ngugi, 2014). Brettel, Chonik and Flatten (2015) aver that entrepreneurial orientation entails the discovery, evaluation and exploitation of opportunities to introduce new products or services to the market.

Entrepreneurial oriented enterprises can undertake uncertain and risky investments and proactively reach markets ahead of competitors thereby realizing high returns. Okeyo et al., (2016) asserts that entrepreneurial orientation is an important phenomenon that plays a crucial role in aligning businesses to market demands and service delivery performance; hence they viewed entrepreneurial orientation as the organizational decision-making inclination, favoring and enhancing entrepreneurial activities and performance. Nobroga (2016) views entrepreneurial orientation as the process, practices and decision-making activities that lead to the new entry. It involves the intentions and actions of key players functioning in a dynamic generative process aimed at new-venture creation. Montoya, Martin and Ceballos (2017) view entrepreneurial orientation as the entrepreneurial attitude and the spirit of looking for new business opportunities. Several studies in Nigeria have acknowledged entrepreneurial orientation as one of the few areas in entrepreneurship research where there is intense growth (Alarape, 2014; Oyeku et al., 2014; Oyelola et al., 2017; Mienpre & Onuoha, 2018). Entrepreneurial orientation is a multidimensional concept and different management scholars have proposed different dimensions of the concept but for the purpose of this study the five-dimensional approach as proposed by Lumpkin and Dess (1996) which includes risk taking propensity, proactiveness, innovativeness, competitive aggressiveness and autonomy forms the basis of this research. However, four dimensions namely risk taking, proactiveness, innovativeness and competitive aggressiveness were adopted for the study.

Pharmacy is a very dynamic profession. The pharmacy profession has improved to include the provision of cognitive services in addition to the traditional role of medication dispensing (Osama & Amer, 2016). Pharmaceutical service is “any activity which pharmacists would use their professional knowledge and abilities to improve pharmacotherapy and disease management by means of interacting with the patient or with other health professional” (Cipolle et al., 1998). It has been used to encompass the variety of pharmacists' interventions and services developed to optimize pharmacotherapy. Medication therapy management MTM service is one of the cognitive pharmaceutical services which community pharmacists deliver, and it has been broadly defined as "a service or group of services that optimize therapeutic outcomes for individual patients" (Bluml, 2005). Medication therapy management encompasses a broad range of professional activities and responsibilities within the licensed pharmacists, or other qualified health care providers' scope of practice. MTM programs must be “designed to reduce the risk of adverse events, defined as a specific service or group of services performed by pharmacists or other healthcare providers that improves medication use and reduces adverse drug events” (Federal Register, 2012). Community pharmacists are strategically positioned to provide MTM services and effectively communicate with providers to improve quality of care for patients (Planas & Farmer, 2009).

Medication therapy management (MTM) services are being delivered by community pharmacists to address issues of polypharmacy; preventable adverse drug events, medication adherence, and medication misuse (Pellegrino et al., 2009). MTM services are designed to be distinct from medication-dispensing services; in particular, they employ a patient-centric and comprehensive approach, rather than an individual product or episodic perspective (Lewin, 2003).

The practice of pharmacy at the community level has changed with the evolution of pharmaceutical care concept which is a new paradigm that has globally influenced the philosophy of pharmacy practice. Community pharmacists must deliver cognitive pharmaceutical services whose outcome is targeted at improving the quality of life of patients. A pharmacist is not only trained to dispense

medications, but should also be able to provide valuable advice/counseling to his customers, as well as other cognitive services such as health/disease screening, chronic conditions monitoring with respect to blood pressure, blood sugar levels, cholesterol, family planning etc. Against this background, there is a compelling need for community pharmacists to develop adequate entrepreneurial skills to be able to navigate this complex and unpredictable business terrain and stay afloat in business. This is because, acquired entrepreneurial skills when properly harnessed, will enhance pharmaceutical care practice innovations; which includes health/disease screening, medication therapy management, pharmacists prescribing medications, patient adherence to medications and management of minor ailments. As entrepreneurship becomes more appealing to community pharmacists as a means of lofty economic engagement and independence, the need arises for understanding their entrepreneurial orientation proclivity. This is because entrepreneurial pharmacists are more likely to adopt new practices in responding to perceived opportunities.

The chances of business failures are not peculiar to any type of business but mortality rate is highest for new business concerns without a particular reference to any type of business. Jayasekara, Fernando & Ranjani (2020) posited that failure of small and medium scale enterprises may arise from limited access to finance, unbeatable competition, isolation, inadequate staff, wrong pricing, poor management among other factors. Hence, professional ventures which community pharmacies belong to, require a high level of professional development for efficient service delivery, because they are owned and managed by highly educated professionals (Pharmacists) and are statutorily expected to be in control and management of the service delivery that takes place in their business premises.

The problems arising from the inability of community pharmacists to envision and harness the blessings associated with proper entrepreneurial orientation proclivity in business are worrisome. Could it be that community pharmacists are not utilizing the risk-taking propensity or that they are not being swift/proactive in observing customers' needs and meeting them swiftly, or that they are lacking in innovative tendencies of not trying out new ways of attending to their customers, knowing that employing these techniques /knowledge helps them in exploring new opportunities in their businesses? This study seeks to explore these and many more by examining the effect entrepreneurial orientation has on medication therapy management services delivery of community pharmacies in Rivers State, Nigeria.

### **AIMS AND OBJECTIVES**

The aim of this study was to examine the relationship between entrepreneurial orientation and medication therapy management (MTM) services delivery of community pharmacies in Rivers State, Nigeria. The specific objectives of the study were as follows:

- (i) To ascertain the relationship between risk taking propensity and medication therapy management services delivery of community pharmacies in Rivers State;
- (ii) To examine the relationship between proactiveness and medication therapy management services delivery of community pharmacies in Rivers State;
- (iii) To determine the relationship between innovativeness and medication therapy management services delivery of community pharmacies in Rivers State;
- (iv) To ascertain the relationship between competitive aggressiveness and medication therapy management services delivery of community pharmacies in Nigeria.

## RESEARCH HYPOTHESES

The following hypotheses were stated and tested in this study;

- (i) **H<sub>01</sub>:** Risk taking propensity has no significant relationship with the delivery of medication therapy management services of community pharmacies in Rivers State.
- (ii) **H<sub>02</sub>:** Proactiveness has no significant relationship with the delivery of medication therapy management services of community pharmacies in Rivers State.
- (iii) **H<sub>03</sub>:** Innovativeness has no significant relationship with the delivery of medication therapy management services of community pharmacies in Rivers State.
- (iv) **H<sub>04</sub>:** Competitive aggressiveness has no significant relationship with the delivery of medication therapy management services of community pharmacies in Rivers State.

## THEORETICAL FRAMEWORK

### Schumpeterian Theory of Innovations

Schumpeter's (1934) theory of innovative profits emphasized the role of entrepreneurship and the seeking out of opportunities for novel value and generating activities which would expand (and transform) the circular flow of income through risk taking, pro activity and innovation by the enterprise leadership which aims at fostering identification of opportunities through intellectual capital of entrepreneur to maximize the potential profit and growth. Schumpeterian growth theory goes beyond economist theory by distinguishing explicitly between physical and intellectual capital, and between saving, which makes physical capital grow, and innovation, which makes intellectual capital grow. It supposes that technological progress comes from innovations carried out by firms motivated by the pursuit of profit, and that it involves what Schumpeter called "creative destruction". That is, each innovation is aimed at creating some new process or product that gives its creator a competitive advantage over its business rivals; it does so by rendering obsolete some previous innovation; and it is in turn destined to be rendered obsolete by future innovations (Schumpeter, 1934).

Endogenous growth theory challenges this neoclassical view by proposing channels through which the rate of technological progress, and hence the long-run rate of economic growth, can be influenced by economic factors. It starts from the observation that technological progress takes place through innovations, in the form of new products, processes and markets, many of which are the result of economic activities. For example, because firms learn from experience how to produce more efficiently, a higher pace of economic activity can raise the pace of process innovation by giving firms more production experience. Also, because many innovations result from R&D expenditures undertaken by profit-seeking firms, economic policies with respect to trade, competition, education, taxes and intellectual property can influence the rate of innovation by affecting the private costs and benefits of doing R&D (Dinopoulos & Thompson, 1998).

Schumpeter, as cited by Swedberg (2000), pointed out economic behaviour is somewhat automatic in nature and more likely to be standardized, while entrepreneurship consists of doing new things in a new manner, innovation being an essential value. As economics focused on the external influences over organizations, he believed that change could occur from the inside, and then go through a form of business cycle to really generate economic change. He set up a new production function where the entrepreneur is seen as making new combinations of already existing materials

and forces, in terms of innovation, such as the introduction of a new good, introduction of a new method of production, opening of a new market, conquest of a new source of production input, and a new organization of an industry (Casson, 2002). For Schumpeter, the entrepreneur is motivated by the desire for power and independence, the will to succeed, and the satisfaction of getting things done (Swedberg, 2000). He conceptualized 'creative destruction' as a process of transformation that accompanies innovation where there is an incessant destruction of old ways of doing things substituted by creative new ways, which lead to constant innovation (Aghion & Howitt, 1992).

The entrepreneur's crucial significance to the dynamics of the capitalist system flows from the fact that it is the entrepreneur's innovations that disrupt the economy and move it forward from one equilibrium to the other. Rather than adapting to external pressures, the entrepreneur destroys the static equilibrium from within the system by inventing new products, processes or behaviors that contrast the routine systems and activities (McDaniel, 2005; Drejer, 2004). This theory was relevant to this study in that entrepreneurs utilize their intellectual capital for 'creative destruction' whereby they destroy the old ways of doing things and substitute them with creative new ways which results to innovation. The theory states that innovation is the act of radical replacement of outdated products with new ones as well as persistent improvement of products and process mechanisms (Tiidd, 2006). Adopting product market strategies and investing in research and development (R&D) give firms competitive advantage through new product or service development and new market entry (Awang et al., 2010), leading to superior performance. Competitive advantage is achieved through differentiated application of valuable, rare and inimitable resources (Kibui et al., 2014). Hence, this theory is found relevant and adopted in explaining entrepreneurial orientation and firm performance in services delivery relationship. In this study, the theory notes that the link between entrepreneurship and a firm's performance of services delivery depends on the management propensity for risk taking, persistent improvement in product and process mechanism as well as achieving competitiveness.

### **McClelland theory of high achievement**

The theory of high achievement motivation was propounded by McClelland (1961); where two characteristics of an entrepreneur were identified, namely, (1) doing things in a new and better way (2) making decisions under uncertainty. He states that people with high achievement motivation are likely to become entrepreneurs and consider profit making in any venture as a measure of success or competency. McClelland theory of high need for achievement is critical to a firm's strategy to attain market leadership by employing innovative marketing techniques. This theory is further supported by Kottler and Armstrong (1996) as cited in Hakal (2011) who upheld the need for employing high skilled sales force and control of distribution channels. According to Bharadwaj and Varadarajan (1993) as cited in Hakal (2011), quality service delivery is an approach that is conducive to increased patronage, repeat service, enterprise survivability and satisfaction. Morrison and Roth (1992) avers that firm's leadership is reflected by the firm's innovative processes, state of the art goods/services and equipment and emphasis on efficient production, which culminates in superior services offerings.

Achievement motivation can be measured by the achievement motivation inventory which is a drive that is developed from emotional state. One may feel to achieve by striving for success and avoid failure. He categorized a person's need into three (i) Need for achievement – success with

individuals own effort (2) Need for power- need to dominate and influence efforts (3) Need for affiliation – to maintain friendly relations with others. McClelland concluded by stating that the need for achievement is essential for successful new entrepreneurship. He also carried out an experiment in an industrial town, which subjected the trainees to control their thinking and talk to themselves positively, imagined themselves in need for challenge to succeed, set planned and achievable goals, strive to get concrete and frequent feedback and imitate their role model. Results revealed (1) that traditional belief do not inhibit an entrepreneur or destroy entrepreneurial orientation (2) that sustainable training can supply the required motivation to an entrepreneur and (3) that achievement motivation has a positive impact on performance of participants. The theory relates to the study because it is the need for achievement in terms of success that drives entrepreneurs to embark on firm level strategies that can reposition the enterprise to thrive and achieve sustainable growth. Entrepreneurial orientation becomes a veritable strategy to achieve this by leveraging on quality service delivery.

## METHODS

The study utilized the correlational research design using the survey method. The survey research method entails the researcher collecting information (data) from a pool of respondents who are considered as a sample of a population under study. The survey method was used in this research because it aids the collection of primary or raw data from a pool of respondents and also because it is easier to adopt the probability sampling technique which ensures an unbiased representation of the population of interest. The population for this study comprises of retail pharmacies in Rivers State that are registered with the Pharmacists council of Nigeria (PCN), and has registered pharmacists either as superintendent pharmacists or owners for at least a year. Four hundred and sixty-two (462) registered community pharmacies in Rivers State therefore constituted the population of the study from which the sample size was determined to be two hundred and fourteen (214) using the Taro Yamame formula. The sampling technique adopted for this study is Simple random sampling. It was applied to ensure that all elements of the population have equal chances of being selected.

A well-structured questionnaire using a five-point Linkert-scale was designed and used to collect primary data from the respondents who were superintendent pharmacists/managers of the community pharmacies under study. Validity of the research instrument was ensured by subjecting the instrument to vetting by other experts in pharmacy management and also subjecting the instrument to factor analysis to ensure construct validity.

**Table 1: Validity of Instrument**

S/NO.	Construct	Factor Analysis
1.	Risk Taking Propensity	0.794
2.	Innovativeness	0.813
3.	Pro-Activeness	0.902
4.	Competitive Aggressiveness	0.913
5	Medication Therapy	0.889

*Source: Computed Using SPSS Version 24.0 windows output*



The research instrument was also evaluated for reliability and the test-retest method was adopted using the Cronbach Alpha scale. 20 items extracted from the questionnaire was used. The result for the items is 0.810. The entire construct falls within an acceptable range for a reliable research instrument of 0.70 which is the standard value as proposed by Nunnally, (1978). This implies that the constructs are within limit of acceptable degree of reliability and thus be used in this study.

**Table 2: Result of Reliability Test**

Reliability Statistics		
Cronbach's Alpha	Mean Score Based on Standardised Items	No. of Items
0.810	74.65	20

*Source: Computed result using SPSS version 24.0 windows output*

**Table 3: Factor Analysis and Reliability Analysis**

Variable	Factor		Factor	Cronbach alpha	
Entrepreneurial Orientation	Risk Taking Propensity	Rt <sub>1</sub>	.846	.879	.853
		Rt <sub>2</sub>	.881		
		Rt <sub>3</sub>	.901		
	Innovativeness	Inn <sub>1</sub>	.904	.874	
		Inn <sub>2</sub>	.912		
		Inn <sub>3</sub>	.876		
	Pro-activeness	Pr <sub>1</sub>	.897	.848	
		Pr <sub>2</sub>	.898		
		Pr <sub>3</sub>	.808		
	Competitive Aggressiveness	Ca <sub>1</sub>	.765	.812	
		Ca <sub>2</sub>	.799		
		Ca <sub>3</sub>	.908		
Medication Therapy	Mt <sub>1</sub>	.709	.777		
	Mt <sub>2</sub>	.796			
	Mt <sub>3</sub>	.811			

*Source: Computed result using SPSS version 24.0 windows output*

The data collected for the study was analysed using: descriptive statistics and regression analysis. The descriptive statistics consist of frequencies and percentages. Percentage analysis was used for analysing the responses from the questionnaire, which are not tailored to testing the formulated hypotheses; while multiple regression analysis which is an inferential statistic was employed to test the hypotheses.

## RESULTS AND ANALYSIS

**Table 4: Distribution and Returns of Research Questionnaire**

Respondents	Questionnaire Distributed	Percentage Distributed	No of Successfully Filled and Returned	No of Unsuccessfully Filled and Not Returned	Percentage Not Returned
Community Pharmacists	214	100%	206	08	3.7%
Total	214	100%	206	08	3.7%

*Source: Field Survey, 2020*

A total of two hundred and fourteen (214) questionnaires were administered to the respondents, out of which, a total of two hundred and six (206) copies were completed and returned in analyzable form representing 96.3%, while the other 08 representing 3.7% were wrongly filled and hence could not be used for analysis.

### Demographic Characteristics of Respondents

Presented below is the analysis of questionnaire administered. Table 5 shows the age distribution of the respondents. Age limit of below 30 years has a frequency of 102 (49.5%), 31-40 has 31 (15.1%), 41-50 has a frequency of 52 (25.2%), while 51 years and above has 21 (10.2%). This is a clear indication that most of the respondents are adults who are still in their working age with enough experience/knowledge on the running of the enterprise and can respond correctly to the questions.

Table 5 also shows marital status of the respondents. Those who are single have a frequency of 122 comprising of 59.2% of the respondents while the married ones have a frequency of 84 making up 40.8%. On the educational qualification of the respondents, those with B. Pharm has a frequency of 165 (80.1%), MSc/Pharm.D has 41 (19.9%), while none has PhD. This reveals the fact that the respondents are literate and qualified enough to provide valid responses for the questions. Sex distribution of the respondents as shown in the demographic data in table 5 shows that males represent a frequency and percentage of 134 (65.1%) while the female represents 72 (34.9%). This is an indication that majority of the respondents are males. Finally, considering the years in service with their pharmacy; respondents with 1-5 years in service with pharmacy has a frequency of 122 (59.2%), those with 6-10 years has frequency of 21 (10.2%), 11-15 years has frequency of 22 (10.7%), while those with 16 years and above has a frequency of 41 (19.9%). This shows that the respondents have experience on the business and can give valid responses to the questions, having spent some reasonable years.

**Table 5: Demographic Characteristics of the Respondents**

<b>Attribute</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Age Distribution</b>		
<30 years	102	49.5
31-40 years	31	15.1
41-50 years	52	25.2
51years and Above	21	10.2
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Marital Status</b>		
Single	122	59.2
Married	84	40.8
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Edu. Qualification</b>		
B. Pharm.	165	80.1
Pharm. D/MSc.	41	19.9
PhD	Nil	Nil
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Sex</b>		
Male	134	65.1
Female	72	34.9
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Years in with Pharmacy</b>		
1-5years	122	59.2
6-10years	21	10.2
11-15years	22	10.7
16years and above	41	19.9
<b>Total</b>	<b>206</b>	<b>100</b>

*Source: Field Survey, 2020.*

### Presentation of the Response Rate Based on the Specific Items

Presentation of respondents' responses on the variables/proxies of the independent and dependent variables.

**Table 6: Reponses on the Extent of Risk-Taking Propensity of the Pharmacies**

<b>Assertions</b>	<b>VHE No. (%)</b>	<b>HE No. (%)</b>	<b>ME No. (%)</b>	<b>LE No. (%)</b>	<b>VLE No. (%)</b>	<b>Total</b>
To what extent are you willing to invest money and time in services that you anticipate good returns on your investment in community pharmacy business?	64 (31.1 %)	81 (39.3 %)	31 (15.0%)	30 (14.6%)	Nil	<b>206</b>
To what extent do you encourage your employees to take calculated risks with respect to new ideas geared at efficient service delivery in your pharmacy business?	42 (20.4%)	153 (74.3%)	11 (5.3%)	Nil	Nil	<b>206</b>
To what extent do you take bold and wide range of actions by venturing into unknown business terrains?	70 (34.0%)	51 (24.8%)	52 (25.2%)	13 (6.3%)	20 (9.7%)	<b>206</b>
To what extent do you have the propensity for undertaking projects/ business ideas with calculated measures of risk in your community pharmacy business?	93 (45.1%)	91 (44.2%)	13 (6.3%)	09 (4.4%)	Nil	<b>206</b>

*Source: Field Survey, 2020*

Table 6 shows assertions and responses with regards to the risk-taking propensity of the respondents. The question items were based on 4 (four) elements. It was revealed that 64 respondents representing 31.1% responded to very high extent that they are willing to invest money and time in services that they anticipate good returns on their investment in community pharmacy business, 81 respondents representing 39.3% responded high extent, 31 respondents representing 15.0% responded at medium extent, while 30 respondents responded at low extent to this assertion.

With reference to the question, to what extent do they encourage their employees to take calculated risks with respect to new ideas geared at efficient service delivery in their pharmacy business, it was revealed that 42 respondents representing 20.4% responded to very high extent, 153 respondents representing 74.3% responded high extent, while 11 respondents representing 5.3% responded at medium extent. Table 6 further revealed that 70 of the respondents, representing 34.0% responded to a very high extent, 51 respondents representing 24.8% responded high extent, 52 respondents representing 25.2%, 13 respondents representing 6.3% and 9 respondents representing 4.4% responded to the assertion that they take bold and wide range of actions by venturing into unknown business terrains.

The table further revealed that 93 respondents representing 45.1% responded to very high extent that they have the propensity for undertaking projects/business ideas with calculated measures of risk in their community pharmacy business, 91 respondents representing 44.2% responded high extent, 131 respondents representing 6.3% responded at medium extent, while 9 respondents representing 4.4% responded at low extent to this assertion.

**Table 7: Responses on the Extent of Pro-Activeness of the Community Pharmacies**

<b>Assertions</b>	<b>VHE No. (%)</b>	<b>HE No. (%)</b>	<b>ME No. (%)</b>	<b>LE No. (%)</b>	<b>VLE No. (%)</b>	<b>Total</b>
To what extent do you often monitor market trends and identify the needs of your customers?	103 (50.0 %)	82 (39.8 %)	10 (4.9%)	11 (5.3%)	Nil	<b>206</b>
To what extent do you like initiating business ideas and strategies that your competitors may respond to?	66 (32.0%)	90 (43.7%)	30 (14.6%)	Nil	20 (9.7%)	<b>206</b>
To what extent do you introduce new ideas which you think can serve as a stimulus for the growth of your pharmacy business?	112 (54.4%)	94 (45.6%)	Nil	Nil	Nil	<b>206</b>
To what extent do you keep thinking of unique products and/or services that will make your pharmacy a model in your business/practice environment?	123 (59.7%)	62 (30.1%)	10 (4.9%)	11 (5.3%)	Nil	<b>206</b>

*Source: Field Survey, 2020*

Table 7; shows questions and responses with regards to the proactive posturing of the respondents. The question items were based on 4 (four) elements/assertions. From table 7, it was revealed that

103 respondents representing 50.0% responded to very high extent that they do you often monitor market trends and identify the needs of your customers, 82 respondents representing 39.8% responded high extent, 10 respondents representing 4.9% responded at medium extent, while 11 respondents representing 5.3% responded at low extent to this assertion.

With reference to the assertion, to what extent do they like initiating business ideas and strategies that their competitors may respond to, it was revealed that 66 respondents representing 32.0% responded to very high extent, 90 respondents representing 43.7% responded high extent, while 30 respondents representing 14.6% responded at medium extent. Table 7 further revealed that 112 of the respondents, representing 54.4% responded to a very high extent, while 94 respondents representing 45.6% responded high extent responded to the assertion that they introduce new ideas which they think can serve as a stimulus for the growth of their pharmacy business.

The table further revealed that 123 respondents representing 59.7% responded to very high extent that they keep thinking of unique products and/or services that will make their pharmacy a model in their business/practice environment, 62 respondents representing 30.1% responded high extent, 10 respondents representing 64.9% responded at medium extent, while 11 respondents representing 45.3% responded at low extent to this assertion.

**Table 8: Responses on the Extent of Innovativeness of the Community Pharmacies**

<b>Assertions</b>	<b>VHE No. (%)</b>	<b>HE No. (%)</b>	<b>ME No. (%)</b>	<b>LE No. (%)</b>	<b>VLE No. (%)</b>	<b>Total</b>
To what extent do you value the introduction of new products and services in your community pharmacy business?	109 (52.9 %)	88 (42.7 %)	Nil	9 (4.4%)	Nil	<b>206</b>
To what extent are you not afraid of generating and implementing new business ideas in your business?	111 (53.9%)	82 (39.8%)	13 (6.3%)	Nil	Nil	<b>206</b>
To what extent do you identify new opportunities for expansion of your community pharmacy business?	84 (40.8%)	92 (44.7%)	30 (14.5%)	Nil	Nil	<b>206</b>
To what extent do you believe that continuous improvement in your products & services determines how successful you can be in your business?	149 (72.3%)	47 (22.8%)	Nil	10 (4.9%)	Nil	<b>206</b>

*Source: Field Survey, 2020*

Table 8 shows questions and responses with regards to the innovative dispositions of the respondents. The question items were based on 4 (four) elements. From table 8, it was revealed that 109 respondents representing 52.9% responded to very high extent that they value the introduction of new products and services in their community pharmacy business, 88 respondents representing 42.7% responded high extent, while 11 respondents representing 5.3% responded at low extent to this assertion.

With reference to the assertion, to what extent are they not afraid of generating and implementing new business ideas in their business, it was revealed that 111 respondents representing 53.9% responded to very high extent, 82 respondents representing 39.8% responded high extent, while 13 respondents representing 6.3% responded at medium extent. Table 4 further revealed that 84 of the respondents, representing 40.8% responded to a very high extent, 92 respondents representing 44.7% responded high extent, while 30 respondents representing 14.5% responded medium extent, to the assertion that they identify new opportunities for expansion of their community pharmacy business.

Table 8 further revealed that 149 respondents representing 72.3% responded to very high extent that they believe that continuous improvement in their products and services determines how successful they can be in their business, 47 respondents representing 22.8% responded high extent, while 10 respondents representing 4.9% responded at low extent to this assertion.

**Table 9: Responses on the Extent of Competitive Aggressiveness of the Community Pharmacies**

Assertions	VHE No. (%)	HE No. (%)	ME No. (%)	LE No. (%)	VLE No. (%)	Total
To what extent do you adopt a competitive posture in the management of your pharmacy business?	56 (27.2 %)	110 (53.4 %)	40 (19.4%)	Nil	Nil	<b>206</b>
To what extent do you respond appropriately to business strategies adopted by your competitors that may have the potential to threaten the survival and growth of your pharmacy business?	55 (26.7%)	122 (59.2%)	29 (14.1%)	Nil	Nil	<b>206</b>
To what extent do you deploy the effective use of unconventional methods to combat trends that may threaten the survival of your pharmacy business?	49 (23.8%)	81 (39.3%)	29 (14.1%)	47 (22.8%)	Nil	<b>206</b>

To what extent do you adopt overly aggressive actions that may impact negatively on the reputation of your pharmacy business while responding to competitors?	84 (40.8%)	72 (35.0%)	29 (14.1%)	12 (5.7%)	9 (4.4%)	<b>206</b>
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*Source: Field Survey, 2020*

Table 9 shows assertions and responses with regards to the competitive aggressiveness of the respondents. The question items were based on 4 (four) elements. From table 9, it was revealed that 56 respondents representing 27.2% responded to very high extent that they do adopt a competitive posture in the management of their pharmacy business, 110 respondents representing 53.4% responded high extent, while 40 respondents representing 19.4% responded medium extent to this assertion.

With reference to the assertion, to what extent do they respond appropriately to business strategies adopted by their competitors that may have the potential to threaten the survival and growth of their pharmacy business, it was revealed that 55 respondents representing 26.7% responded to very high extent, 122 respondents representing 59.2% responded high extent, while 29 respondents representing 14.1% responded at medium extent. Table 5 further revealed that 49 of the respondents, representing 23.8% responded to a very high extent, 81 respondents representing 39.3% responded high extent, 29 respondents representing 14.1% responded at medium extent, while 47 respondents representing 22.8% responded low extent, to the assertion that they deploy the effective use of unconventional methods to combat trends that may threaten the survival of their pharmacy business.

Table 9 further revealed that 84 respondents representing 40.8% responded to very high extent that adopt overly aggressive actions that may impact positively on the reputation of their pharmacy business while responding to competitors, 72 respondents representing 35.0% responded high extent, 29 respondents representing 14.1% responded at medium extent, 12 respondents representing 5.7% responded low extent while 9 respondents representing 4.4% responded at very low extent, to this assertion.



**Table 10: Responses on the Extent of Delivery of Medication Therapy Management Services by Community Pharmacies**

Assertions	VHE	HE	ME	LE	VLE	Total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	
To what extent do you evaluate medication therapy in your pharmacy and identify drug related problems in prescriptions for your patients?	146 (70.9 %)	60 (29.1 %)	Nil	Nil	Nil	<b>206</b>
To what extent do you render adverse drug reactions (ADR) detection in your community pharmacy?	124 (60.2%)	71 (34.5%)	Nil	11 (5.3%)	Nil	<b>206</b>
To what extent do you deliver adherence improving services to maximize therapeutic outcomes in your community pharmacy?	124 (60.2%)	82 (39.8%)	Nil	Nil	Nil	<b>206</b>
In the event of drug related problems, to what extent do you proactively provide interventions and/or referral services as part of your routine community pharmacy practice?	122 (59.2%)	71 (34.5%)	Nil	13 (6.3%)	Nil	<b>206</b>

**Source: Field Survey, 2020**

Table 10 shows assertions and responses with regards to the delivery of medication therapy management services. The question items were based on 4 (four) elements. From table 10, it was revealed that 146 respondents representing 70.9% responded to very high extent that they do evaluate medication therapy in their pharmacy and identify drug related problems in prescriptions for their patients, while 60 respondents representing 29.1% responded high extent to this assertion.

With reference to the assertion, to what extent do they render adverse drug reactions (ADR) detection in their community pharmacy, it was revealed that 124 respondents representing 60.2% responded to very high extent, 71 respondents representing 34.5% responded high extent, while 11 respondents representing 5.3% responded at low extent. Table 6 further revealed that 124 of the

respondents, representing 60.2% responded to a very high extent, while 82 respondents representing 39.8% responded high extent, to the assertion that they deliver adherence improving services to maximize therapeutic outcomes in their community pharmacy. Table 10 further revealed that 122 respondents representing 59.2% responded to very high extent that in the event of drug related problems, to what extent do you proactively provide interventions and/or referral services as part of your routine community pharmacy practice, 71 respondents representing 34.5% responded high extent, while 13 respondents representing 6.5% responded at low extent, to this assertion.

### Hypotheses Testing

The data generated from the field was exhaustively presented and analyzed through the use of statistical package for social science (SPSS) version 24.0 for windows output. The following null hypotheses formulated in chapter one of this study was tested using multiple regression.

**H<sub>01</sub>:** Risk taking propensity has no significant relationship with medication therapy management services delivery of community pharmacies in Rivers State.

**Table 11(a): Regression Model Statistics for Risk Taking Propensity and Medication Therapy Management Services**

Model	R	R Square	Adj. R Square	Std. Error of Estimate	Durbin Watson
1	.915 <sup>a</sup>	.837	.810	1.085	2.04

Dependent variable: Medication Therapy Management Services

a: Predictor variable

Source: SPSS printout (Version 24.0 for windows output), 2020

**Table 11(B): Regression Coefficient for Risk Taking Propensity and Medication Therapy Management Services**

Model	Unstandardized coefficient		Standardized coefficient		
	$\beta$	Std Error	Beta	T	Sig
1 (Constant)	6.145	.611		12.23	.000
Risk Taking Propensity	.603	.467	.802	2.33	.000

Dependent variable: Medication Therapy Management Services

*Source: SPSS regression printout, (version 24.0 for windows output).*

The study in this test, examined whether there is significant/positive effect of risk-taking propensity on the delivery of medication therapy management services. Based on the condensed outcome of the four questions administered for testing the hypothesis one and aggregate responses, regression was employed to test the variables. The result emerged:  $P < 0.05 = 0.00$ ;  $\beta = .802$ ;  $t^* = 2.33$ ;  $F^* = 8.01$ ;  $DW = 2.04$ ;  $R^2 = 0.810$

From the regression result in table 11(b), the calculated t-value for risk taking propensity (RTP) is 2.33 is greater than the critical value of 1.96. It falls in the rejection region and hence, we will reject the first null hypothesis ( $H_{01}$ ). This implies that risk taking propensity (RTP) has a positive relationship with the delivery of medication therapy management services by community pharmacists in Rivers State. The F-statistics which is used to examine the overall significance of regression model equally showed that the result is significant, as indicated by a value of the F-statistic, 8.01 and it is significant at the 5 percent level.

The coefficient of determination (R-square), used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction, that is, 83.7% change in medication therapy management services (MTM) was due to risk taking propensity (RTP), while 16.3% unaccounted variations was captured by the white noise error term. It showed that risk taking propensity (RTP) had significant/positive relationship with medication therapy management services delivery of community pharmacies in Rivers State.

Durbin-Watson (DW) statistics indicates that there is no autocorrelation among the variables as captured by (DW) statistic of 2.04, and as thus the estimates are unbiased and can further be relied upon for sound policy decisions.

**H<sub>02</sub>:** Pro-activeness has no significant relationship with medication therapy management services delivery of community pharmacies in Rivers State.

**Table 12(a): Regression Model Statistics for Pro-Activeness and Medication Therapy Management Services**

Model	R	R square	Adj. R square	Std. Error of Estimate	Durbin Watson
1	.894 <sup>a</sup>	.799	.790	1.209	2.00

Dependent variable: Medication Therapy Management Services

a: Predictor variable

*Source: SPSS printout (Version 24.0 for windows output), 2020*

**Table 12(B): Regression Coefficient for Pro-Activeness and Medication Therapy Management Services**

Model	Unstandardized coefficient		Standardized coefficient		
	$\beta$	Std Error	Beta	T	Sig
1 (Constant)	5.543	.491		10.46	.000
Pro-activeness	.659	.511	.894	4.01	.001

Dependent variable: Medication Therapy Management Services

*Source: SPSS regression printout, 2020 (version 24.0 for windows output).*

$P < 0.05 = 0.001$ ,  $\beta = .894$ ,  $t^* = 4.01$ ,  $F^* = 4.10$ ,  $DW = 2.00$ ,  $R^2 = .799$

From the regression result in table 12(b), the calculated t-value for pro-activeness is 4.01, which is greater than the critical value of 1.96. It falls in the rejection region and hence, we reject the second null hypothesis ( $H_{02}$ ). This shows that there is a positive relationship between pro-activeness and medication therapy management services delivery of community pharmacies in Rivers State. The F-statistics which is used to examine the overall significance of regression model equally showed that the result is significant, as indicated by a value of the  $F$ -statistic, 4.10 and it is significant at the 5.0 percent level.

The coefficient of determination (R-square), used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction, that is, 79.9% change in medication therapy management services of community pharmacists in Rivers State was due to pro-activeness, while 20.1% unaccounted variations were captured by the white noise error term. It showed that pro-activeness had a positive/significant relationship with medication therapy management services delivery of community pharmacies in Rivers State.

Durbin-Watson (DW) statistics indicates that there is no autocorrelation among the variables as captured by (DW) statistic of 2.0. Thus, the estimates are unbiased and can be relied upon for sound policy decisions.

**H<sub>03</sub>:** Innovativeness has no significant relationship with medication therapy management services delivery of community pharmacies in Rivers State

**Table 13(a): Regression model statistics for Innovativeness and medication therapy management services**

Model	R	R square	Adj. R square	Std. Error of Estimate	Durbin Watson
1	.899 <sup>a</sup>	.808	.800	1.001	2.14

Dependent variable: Medication Therapy Management Services

a: Predictor variable

*Source: SPSS printout (Version 24.0 for windows output), 2020*

**Table 13(a): Regression Coefficient for Innovativeness and Medication Therapy Management Services**

Model	Unstandardized coefficient		Standardized coefficient		
	$\beta$	Std Error	Beta	T	Sig
1 (Constant)	5.880	.512		9.89	.000
Innovativeness	.600	.642	.801	3.95	.001

Dependent variable: Medication Therapy Management Services

*Source: SPSS regression printout, 2020 (version 24.0 for windows output).*

$P < 0.05 = 0.001$ ,  $\beta = .801$ ,  $t^* = 3.95$ ,  $F^* = 4.95$ ,  $DW = 2.14$ ,  $R^2 = .808$

From the regression result in table 13(b), the calculated t-value for innovativeness is 3.95 and is greater than the critical value of 1.96. It falls in the rejection region and hence, we reject the third null hypothesis ( $H_{03}$ ). This shows that there is a positive relationship between innovativeness and medication therapy management services delivery of community pharmacies in Rivers State.

The F-statistics which is used to examine the overall significance of regression model equally showed that the result is significant, as indicated by a value of the *F*-statistic, 4.95 and it is significant at the 5.0 percent level. The coefficient of determination (R-square), used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction, that is, 80.8% change in medication therapy management services was due to innovativeness, while 19.2% unaccounted variations were captured by the white noise error term. It showed that innovativeness had a positive/significant effect on the delivery of medication therapy management services.

Durbin-Watson (DW) statistics indicates that there is no autocorrelation among the variables as captured by (DW) statistic of 2.14. Thus, the estimates are unbiased and can be relied upon for sound policy decisions.

**H<sub>04</sub>:** Competitive aggressiveness has no significant relationship with medication therapy management services delivery of community pharmacies in Rivers State.

**Table 14(a): Regression Model Statistics for Competitive Aggressiveness and Medication Therapy Management Services**

Model	R	R square	Adj. R square	Std. Error of Estimate	Durbin Watson
1	.916 <sup>a</sup>	.839	.830	1.001	2.23

Dependent variable: Medication Therapy Management Services

a: Predictor variable

Source: SPSS printout (Version 24.0 for windows output), 2020

**Table 14(b): Regression Coefficient for Competitive Aggressiveness and Medication Therapy Management Services**

Model	Unstandardized coefficient		Standardized coefficient		
	$\beta$	Std Error	Beta	T	Sig
1 (Constant)	5.880	.512		9.99	.000
Competitive Aggressiveness	.600	.642	.804	4.01	.003

Dependent variable: Medication Therapy Management Services

**Source:** SPSS regression printout, 2020 (version 24.0 for windows output).

$P < 0.05 = 0.003$ ,  $\beta = .804$ ,  $t^* = 4.01$ ,  $F^* = 4.99$ ,  $DW = 2.23$ ,  $R^2 = .839$

From the regression result in table 14(b), the calculated t-value for competitive aggressiveness is 4.01 and is greater than the critical value of 1.96. It falls in the rejection region and hence, we reject the fourth null hypothesis ( $H_{04}$ ). This shows that there is a positive relationship between competitive aggressiveness and medication therapy management services delivery of community pharmacies in Rivers State.

The F-statistics which is used to examine the overall significance of regression model equally showed that the result is significant, as indicated by a value of the *F*-statistic, 4.99 and it is significant at the 5.0 percent level. The coefficient of determination (R-square), used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction, that is, 83.9% change in medication therapy management services was due to competitive aggressiveness, while 16.9% unaccounted variations were captured by the white noise error term. It showed that competitive aggressiveness had a positive/significant effect on the delivery of medication therapy management services.

Durbin-Watson (DW) statistics indicates that there is no autocorrelation among the variables as captured by (DW) statistic of 2.23. Thus, the estimates are unbiased and can be relied upon for sound policy decisions.

### SUMMARY OF FINDINGS

**Table 15: Showing Summary of Regression Statistical Values for the Variables**

HYP	R	R <sup>2</sup>	ADJ R <sup>2</sup>	T	B	F	STD ERROR	P	DW
H <sub>01</sub> RT-MTM	0.915	0.837	0.810	2.33	0.802	8.01	1.085	0.000	2.04
H <sub>04</sub> PR-MTM	0.894	0.799	0.790	4.01	0.894	4.10	1.209	0.001	2.00
H <sub>07</sub> INN-MTM	0.899	0.808	0.800	3.95	0.801	4.95	1.001	0.001	2.14
H <sub>010</sub> CA-MTM	0.916	0.839	0.830	4.01	0.804	4.99	1.001	0.003	2.23

### DISCUSSION OF FINDINGS

#### **Relationship between risk-taking propensity and the delivery of medication therapy management services of community pharmacies in Rivers State.**

The analysis of research question one was to determine if any relationship exists between risk taking propensity and medication therapy management services delivery of community pharmacies in Rivers State. From table 11(a), the ( $R^2$ ) statistic was 0.837. This showed that 83.7% variance in the delivery of medication therapy management services was explained by the risk-taking propensity as a dimension of the independent variable. Therefore, 16.3 % of the variance in medication therapy management services was accounted for by other predictors not considered in

the model. Taking into cognizance the contribution of the explanatory variable indelivery of medication therapy management services, the beta value for risk taking propensity was 0.802. The beta value apparently indicated that the predictor variable of risk-taking propensity had a significant/positive relationship with delivery of medication therapy management services of community pharmacies in Rivers State.

The result from table 11(b) demonstrated that the regression analysis of variance otherwise referred to as the F-ratio computed as 8.01 was greater than F-critical of 3.00 at 5% alpha ( $F=8.01, p < .05$ ). This clearly showed that the regression model had a good fit. Therefore, there was a significant relationship between risk taking propensity and medication therapy management services. Therefore, to investigate the statistically significant effect of risk-taking propensity onthe delivery of medication therapy management services by community pharmacies in Rivers State, the t-test of significance was used. From table 11(b), the results indicated that risk taking propensity had a significant/positive effect on medication therapy management services delivery of community pharmacies in Rivers State ( $t$ -computed 2.33 >  $t$ -critical 1.960,  $t = 2.33, p < .05$ ).

Therefore, the null hypothesis was rejected. This is in line with the Schumpeterian theory which posits that entrepreneurs must continually think of innovative services that will meet the needs of their customers. Community pharmacies take risk by investing their resources in the delivery of these innovative medication therapy services with the anticipation of returns on their investment. The findings of this investigation also agree with Fenzied (2018), Gathungu and Irungu (2018) and Olubiyet *al.* (2019) who all affirm that the tendency of entrepreneurs in committing resources towards supporting business activities, assist in delivering services that meets expectations of customers hence creating satisfaction that spurs repeat service. Therefore, this study concludes that there is a positive/significant effect of risk-taking propensity onthe delivery of medication therapy management services by community pharmacists in Rivers State.

### **Relationship between pro-activeness and the delivery of medication therapy management services of community pharmacies in Rivers State.**

The analysis of research questionnaire was toevaluate if any relationship exists between pro-activeness and medication therapy management services delivery of community pharmacies in Rivers State. In table 12(a), the  $R^2$  statistics was 0.799 and that demonstrated that 79.9% of the variance inmedication therapy management services delivery of community pharmacies in Rivers State was accounted for by the predictor variable of pro-activeness included in the model. Therefore 20.1% of variance in the delivery of medication therapy management services by community pharmacies in Rivers Statewas accounted for by other predictors not considered in the model. The beta value of 0.894 obviously established that the explanatory variable of pro-activeness had a positive effect onthe delivery of medication therapy management services in community pharmacies in Rivers State.

From table 12(b), F-test was used to test the hypothesis at 5% alpha of significance and the computed F value was 4.10 and was greater than F-critical of 3.00 ( $F = 4.10, P < 0.5$ ). This clearly showed that the regression model had a good fit. Therefore, there was a significant relationship between pro-activeness and the delivery of medication therapy management services by community pharmacists in Rivers State. To further synchronize the statistically significant effect of pro-activeness onthe delivery of medication therapy management services by community pharmacists in Rivers State, the t-test of significance was used. In table 12(b), the results indicated

that pro-activeness had positive/significant effect on the delivery of medication therapy management services by community pharmacists in Rivers State ( $t$ -computed 4.01 >  $t$ -critical 1.96,  $P < 0.05$ ).

This finding also agrees with findings of previous authors which includes that of Doucette *et al.* (2006), Sweany *et al.* (2014), Gathungu and Irungu (2018), amongst others, who all affirm that opportunity seeking and forward-looking perspective by entrepreneurs helps in understanding the condition of service delivery that can help to manage clients' needs. For patients, it thus means community pharmacists can better help them understand their health conditions and manage them. This finding shows that community pharmacies in a bid to beat their competitors and have a fair share of the market, must be forward looking by exploring opportunities that abound in the environment using their internal strength to device strategies for outperforming their competitors by delivering top notch cognitive services like medication therapy management services that may earn them customer loyalty. Thus, the study concludes that pro-activeness had positive/significant effect on the delivery of medication therapy management services by community pharmacists in Rivers State.

#### **Relationship between innovativeness and the delivery of medication therapy management services of community pharmacies in Rivers State.**

The analysis of research question seven was to determine if any relationship exists between innovativeness and delivery of medication therapy management services of community pharmacies in Rivers State. In table 13(a), the  $R^2$  statistics was 0.808 and that demonstrated that 80.8% of the variance in medication therapy management services delivery of community pharmacies in Rivers State was accounted for by the predictor variable of innovativeness included in the model, therefore 19.2% of the variance in medication therapy management services was accounted for by other predictors not considered in the model. The standardized coefficient otherwise referred to as the beta value for innovativeness was 0.801. The beta value obviously established that the explanatory variable of innovativeness had a positive effect on medication therapy management services delivery of community pharmacies in Rivers State.

From table 13(b), F-test was used to test the hypothesis at 5% alpha of significance and the computed F value was 4.95 and was greater than F-critical at 3.00 ( $F = 4.95$ ,  $P = < 0.05$ ). This clearly showed that the regression model had a good fit. Therefore, there was a significant relationship between innovativeness and the delivery of medication therapy management services by community pharmacists in Rivers State. To further affirm the statistically significant effect of innovativeness on the delivery of medication therapy management services by community pharmacists in Rivers State, the t-test of significance was used. From table 13(b), the results indicated that innovativeness had positive/significant effect on the delivery of medication therapy management services by community pharmacists in Rivers State ( $t$ -computed 3.95 >  $t$  critical 1.96,  $p < 0.05$ ).

The findings of this study are in line with Schumpeterian theory of innovation which emphasizes the role of innovation aimed at creating some new processes or product that gives the entrepreneur an edge by rendering services that help customers understand their conditions and how to manage them accordingly. The findings are also in line with previous findings such as that of Jambuligan and Doucette (1999), Nobrega, (2016), Fenzeid, (2018); amongst others; who all averred that entrepreneurs' willingness to introduce new products/services and support creativity, increases



their chances of delivery of quality services to customers and thus encouraging repeat patronage. Medication therapy management services delivery which has potential to reduce hospitalizations, improve patients' overall clinical outcomes and reduce health care costs, lends credence to a good level of innovation by the community pharmacists. The conclusion here is that innovativeness has positive/significant effect on medication therapy management services delivery of community pharmacies in Rivers State.

### **Relationship between competitive aggressiveness and the delivery of medication therapy management services of community pharmacies in Rivers State.**

The analysis of research objective ten was to assess if any relationship exists between competitive aggressiveness and medication therapy management services delivery of community pharmacies in Rivers State. In the table 14(a), the  $R^2$  statistic was 0.839 and this demonstrated that 83.9% of the variance in the delivery of medication therapy management services by community pharmacists in Rivers State was accounted for by the predictor variable of competitive aggressiveness included in the model. In view of the contribution of the predictor variable to the delivery of medication therapy management services by community pharmacists in Rivers State, the standardized coefficient otherwise referred to as the beta value for competitive aggressiveness was 0.804. The beta value obviously established that the explanatory variable of competitive aggressiveness had a positive effect on the delivery of medication therapy management services by community pharmacists in Rivers State.

From table 14(b), F-test was used to test the hypothesis at 5% alpha of significance and the computed F value was 4.99 and was greater than F-critical of 3.00 ( $F=4.99, p < .05$ ). This clearly disclosed that the regression model had a good fit. Therefore, there was a significant relationship between competitive aggressiveness and the delivery of medication therapy management services by community pharmacists in Rivers State. To further scrutinize the statistically significant effect of competitive aggressiveness on the delivery of medication therapy management services by community pharmacists in Rivers State, the t-test of significance was used. From table 14(b), the results indicated that competitive aggressiveness had a significant/positive effect on the delivery of medication therapy management services by community pharmacists in Rivers State (t-computed 4.01 > t-critical 1.960,  $t = 4.01, p < .05$ ).

The result of this study also agrees with previous works of Oguese *et al.* (2017); Gathungu and Irungu, (2018), Peris (2019) amongst others; who all assert that an enterprise that puts in efforts to outperform rivals by offering goods/services to aid customers get the maximum satisfaction, retain loyal customers. This finding reckons that competitive aggressiveness is thus, a mechanism for the survival and success of community pharmacies. It is therefore important for pharmacies to be entrepreneurially oriented by being competitively aggressive to survive the intensely competitive market environment. Thus, the study concludes that competitive aggressiveness has a significant/positive relationship with medication therapy management services delivery of community pharmacies in Rivers State.

### **CONCLUSION**

The study concludes that Entrepreneurial orientation (using the four dimensions of risk-taking propensity, pro-activeness, innovativeness, and competitive aggressiveness) has a positive and significant relationship with the delivery of medication therapy management services by community pharmacies in Port Harcourt, Rivers State, Nigeria.

## RECOMMENDATIONS

Sequel to the findings and conclusions above, the following recommendations are made:

- i. Community pharmacies should improve on their innovativeness as this will help them to discover and make use of new techniques and processes of cognitive services delivery.
- ii. Community pharmacies should endeavor to be pro-active to be able to stand competitors in the market. This will help them venture into new businesses that will accelerate growth of their firms and enhance pharmaceutical services delivery.
- iii. Community pharmacies should see risk taking as a potent force towards enhancing their performance in service delivery.
- iv. Community pharmacies should continuously adopt a competitive aggressiveness posture for them to overcome the intense competition that exists in the external business environment.

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