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Usage of Major Heuristics in Property Investment Valuation in Nigeria

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Abstract

The study addressed the gap in research on major heuristics in property valuation hitherto confined to anchoring and adjustment at the neglect of the other three: availability; representative and positivity. The aim was to investigate usage of all types amongst Nigerian valuers. The study undertook cross-sectional questionnaire survey of 159 of the 270 Head Offices of Estate Surveying and Valuation firms in Lagos Metropolis, while 29 and 30 questionnaire were distributed to the Head Offices of the entire Estate Surveying and Valuation Firms in Abuja and Port-Harcourt respectively. Statistical tools such as frequency distribution tables and relative importance indices (RII) were employed. Results revealed that apart from anchoring and adjustment (RII =2.359), valuers also make recourse to availability (frequency counts for various parameters: outgoings, 71.9%; rental evidence, 55.7%; and yield, 63.5%), representative (RII for various parameters: different locations in neighbourhood 1.80; extra bathroom and toilet, 2.012; disparate plot size, 1.63; larger parking space, 1.66; extra garrage, 2.1; high quality floor/wall finishes, 1.71) and positivity (frequency count of above 80%). The results were above average hence the researchers confirmed the usage of the other three heuristics. The study emphasised need for focus in other major heuristics for more holistic research.

Key words: Investment Valuation, Major Heuristics, Nigeria, Property.

Introduction

Heuristics is the use of simplifying shortcuts or (rule of thumb) in solving complex problems. As complexity increases, people use heuristics to eliminate alternatives, often with just a limited amount of information search and evaluation. In this regard, Simon (1978) showed that as the number of decision alternatives increase, the number of items investigated actually decreases. Similarly, Hardin (1997) noted that when properly applied, information processing

heuristics reduce the search time and thus the time required in completing tasks. Hogarth (1981) emphasized that heuristics are generally functional and that feedback and training are important in its generation. Hogarth (op. cit.) acknowledged the potential biasing effect of heuristics, but concluded that experience and feedback should mitigate much bias.

Tversky and Kahnemann (1974) identified three types of heuristics: representative; availability and anchoring and adjustment. Evans (1989) later added a fourth: positivity (other lesser heuristics have subsequently been identified). Hence, there are four principal types of heuristics: availability (shortcut formed based on the experience which the decision maker has had in the past with the type of problem or situation at hand. An apparently successful strategy or solution of the problem means that tasks will tend to be perceived in a certain way once essential components have been recognized. Once this behaviour has been learned, it is very hard to alter. Data collection tends to be based on ease of retrieval, meaning that the decision maker will choose the most recent information or the information most easily recalled or obtained). Representative (on the other hand is similar to stereotyping. A decision-maker classifies an event or object with others of a type that they are familiar with. Lessons are learned from experience and assumptions are made that the subject in a task is the same as that seen elsewhere). Anchoring and adjustment came out of the observation that decision-makers tend to solve problems by forming a-priori estimates of what the answer might be. Mussweiler (2002) described anchoring as the assimilation of a numeric estimate towards a previously considered standard. This initial estimate is adjusted as more information is obtained until a final solution is reached. In other words, anchoring occurs when a person picks an initial starting point (such as value) as a reference point which may be given, estimated, or implied and then proceeds to use this information as the basis of evaluating a given option or course of action. Adjustment occurs when the person takes this initial reference point and proceeds with the tweaking of such value based on an estimate of

probabilities of potential results. Positivity was identified when Evans (1989) noted that humans have a fundamental tendency to seek information consistent with their current beliefs and avoid the collection of potentially falsifying evidence. They adopt strategies that are designed to confirm rather than refute beliefs. In this regard he suggested that humans look for ways of confirming their individual perceptions of the world.

Although studies on heuristics and biases in judgments under uncertainty can be traced to the works of cognitive psychologists (such as Slovic and Lichtenstein, 1971; Tversky and Kahneman's 1974; and Kahneman and Tversky, 1981, 2000), such studies are increasingly relevant in property valuation research because valuers have been found to employ the anchoring and adjustment heuristic behaviour.

The first behavioural anchoring study on real estate focused on real estate brokers, though further research invariably centred on valuation. The initial behavioural anchoring study was Northcraft and Neale (1987) who experimentally investigated the anchoring behaviour of real estate brokers on property pricing decisions. The authors found persistent anchoring to asking price in their estimates. Black and Diaz (1996), Black (1997) and Diaz, Zhao, and Black (1999) further pursued this point and showed significant anchoring to actual asking price. Some other researchers have also shown asking price to be a powerful anchor (Rabianski, 1992; White et al, 1994; Blount et al. 1996), though Diekmann et al (1996) showed that initial purchase price was another powerful anchor. Gallimore (1994, 1996), Gallimore and Wolverton (1997), Gallimore, Hansz, and Gray (2000), and Gallimore and Gray (2002) revealed that valuers anchor on factors such as commentators' views, most recent information, pending sales price, previous transaction price, respectively.

Further researches invariably centred on valuation. Gallimore (1994, 1996) conducted some experimental work into valuation processes, among valuers in the UK. His study conducted a series of experiments

to examine the effect of anchoring and confirmation bias on valuations and he concluded that there is sufficient evidence of such bias especially in unfamiliar locations. Harvard (1999) conducted similar experiments on valuers in the UK and also found that an anchoring and adjustments heuristic strategy is adopted by valuers in unfamiliar locations. His finding is similar to the findings in Hong Kong (Wong, 2006). Other studies carried out to identify the existence of and nature of anchoring and adjustment in the valuation process include (Cho and Megbolugbe, 1996; Diaz, 1997; Diaz and Hansz, 1997, 2001; Hamilton and Clayton, 1999; Harvard, 1999, 2001; Clayton, Geltner, and Hamilton 2001; Hansz and Diaz 2001; Gallimore and Gray 2002; Cypher and Hansz, 2003; Hansz, 2004a; 2004b). These studies confirmed the existence of anchoring and adjustment heuristics except Diaz (1997).

In Nigeria research in Anchoring and Adjustment Heuristics though in its infancy has likewise been carried out. Adegoke and Aluko (2007) studied the occurrence of anchoring and adjustment in the valuation of commercial properties. Their study which surveyed one hundred and twenty-two (122) Estate Surveying and Valuation firms in Lagos metropolis revealed that Estate Surveyors and Valuers used anchoring and adjustment heuristic behavior in forming initial judgements about valuation tasks. Adegoke (2008) sought to examine whether the use of anchoring and adjustment heuristics varied according to valuer familiarity with the location of valuation assignments. He employed a similar methodology as the earlier study and found that this type of heuristic was predominant in unfamiliar location of operation. In a bid to examining the continous problems of non-reliability, inconsistency and irrationality in Nigerian Valuation practice, Ogunba and Ojo (2007) envisgaed the usage of anchoring and adjustment as a trigger. Adegoke, Aluko and Ajila (2012), in a study involving both quasi-experimental and the survey methods of One hundred and twenty two (122) estate surveying and valuation firms in Lagos Metropolis, revealed that valuers do anchor during a valuation task and that this initial judgement came from valuer's knowledge and

experience. It was showed that the initial judgement was a strong determinant of the valuation outcome.

The significant gap is that the existence of the three other major heuristics identified in the field of cognitive psychology has been ignored in valuation research: Such missing heuristics include representative; availability; and positivity. Unquestionably, the exclusive focus on anchoring and adjustment creates a decisively skewed research and leaves an unacceptable dearth in property valuation literature and policy formulation. This study however intends to fill this gap.

Research method

This study which is confined to the investment method of valuation, being the most carried out in the country (Iroham, 2007), is a cross-sectional research that entailed the survey of 159 out of the 270 Head Offices of Estate Surveying Firms in Lagos Metropolis, the entire 29 and 39 Head Offices of Estate Surveying Firms in Abuja and Port-Harcourt respectively. The choice of the three towns in Nigeria is due to its major and active valuation operations being carried. The researcher considered it useful to adopt random sampling for Lagos Metropolis so as to avoid any form of sampling prejudice that could potentially mar the objectivity and conclusive findings of the research. However, the random selections were undertaken within a stratified sampling framework, namely: Lagos Island, Victoria Island, Ikoyi Island, Apapa Island, Surulere and Ikeja business districts. The number of firms randomly selected within each stratum was in proportion to the number in the total population. Questionnaire administered in the form of conducting interview was adopted as the primary data collection technique. The data collected was measured using ordinal scales. Each point on the scale was assigned a weight and a form of weighted frequency ranking technique was required. Accordingly, the techniques considered appropriate for the analysis was a combination of frequency distribution, and the Relative Important Index.

Data analysis and discussion

Out of the 159 questionnaires administered to the head offices of Estate Surveying firms in Lagos Metropolis, a response rate of 74.84% was achieved, that is, 119 questionnaires duly filled and returned. For Head Offices of Estate Surveying firms in Abuja, a response rate of 86.21% (25 questionnaires) was achieved. Port-Harcourt area also recorded an encouraging response rate of 76.67% (23 questionnaires). This resulted to a cummulative response rate of 76.61%.

In the three study areas, Lagos, Abuja and Port-Harcourt, majority of the respondents (about 53%) fall within the age bracket of 31-40 years. The highest academic qualification for most respondents in the three towns of study is the Bachelor of Science (B.Sc) degree (about 50%) as against the Higher National Diploma and other research degrees. This is enough for acquiring the basic professional qualification, for practice in Nigeria, of which majority of the respondents (about 87%), irrespective of the city in focus, have attained.

Anchoring and adjustment heuristics

In order to investigate the proposition on Anchoring and Adjustment, respondents in the three study areas were questioned on whether they make recourse to previous valuation/sales in the valuation of properties. The responses to this inquiry were measured using a nominal scale (yes or no responses). Thereafter there was an investigation into the frequency of utilization of anchoring and adjustment in valuation measured using an ordinal scale and analyzed by means of relative importance indices. Table 1 and Table 2 present the findings on these two lines of inquiry.

Table 1 Anchoring and Adjustment Heuristics in Valuation

			Anchoring & adjustment on past valuations/sales		Total
			Yes	No	
Study Area	Lagos	Count	91	28	119
		% within Lagos	76.5%	23.5%	100.0%
		% within all locations	71.1%	71.8%	71.3%
	Abuja	Count	18	7	25
		% within Abuja	72.0%	28.0%	100.0%
		% within all locations	14.1%	17.9%	15.0%
	Port-Harcourt	Count	19	4	23
		% within Port- Harcourt	82.6%	17.4%	100.0%
		% within all locations	14.8%	10.3%	13.8%
Total		Count	128	39	167
		% within Location of firm	76.6%	23.4%	100.0%
		% within all locations	100.0%	100.0%	100.0%

Source: Authors' field survey 2012

An analysis of Table 1 indicates that majority of respondents make use of anchoring and adjustment heuristics in carrying out valuation. For instance 128 (76.6%) of respondents in all locations answered yes to the use of anchoring and adjustment heuristics, these figures represent 76.5%, 72% and 82.6% affirmation of the use of anchoring and adjustment heuristics amongst valuers in Lagos, Abuja and Port-Harcourt respectively.

Table 2: frequency of Anchoring & Adjustment Heuristics in Valuation

			Frequency Opinions					RII
			Very Often	Often	Seldom	Never	Total	
Study Areas	Lagos	Count	17	39	37	26	119	2.395
		% within Lagos	14.3%	32.8%	31.1%	21.8%	100.0%	
		% within all locations	89.5%	68.4%	66.1%	74.3%	71.3%	
	Abuja	Count	1	9	10	5	25	
		% within Abuja	4.0%	36.0%	40.0%	20.0%	100.0%	
		% within all locations	5.3%	15.8%	17.9%	14.3%	15.0%	2.24
	Port-Harcourt	Count	1	9	9	4	23	2.304
		% within P. Harcourt	4.3%	39.1%	39.1%	17.4%	100.0%	
		% within all locations	5.3%	15.8%	16.1%	11.4%	13.8%	
Total		Count	19	57	56	35	167	
		% within Location of firm	11.4%	34.1%	33.5%	21.0%	100.0%	2.359
		% within all locations	100.0	100.0%	100.0%	100.0%	100.0%	

Source: Authors' field survey 2012

With regard to the frequency of use of anchoring & adjustment heuristics in valuation, Table 2 reveals that in each of the three study areas - Lagos, Abuja and Port-Harcourt - the weighted mean (RII) score was above average (2.395; 2.24 and 2.304). The overall RII score for all locations is 2.359. This is quite substantial (above average, given the maximum of 4). These results demonstrate that

anchoring and adjustment heuristics is substantially evident in Nigerian valuation.

Availability heuristics

This sub section addresses the existence of availability heuristics amongst Nigerian valuers. In the use of availability heuristics, Nigerian valuers tend to employ data inputs (yield, rental values, outgoings etc) that are most easily obtained in their valuation calculations rather than derive the inputs from thorough market surveys. In the questionnaire, three related questions were asked to determine the existence of availability heuristics. Details as shown in Table 3, Table 4 and Table 5

Table 3: Available Outgoings versus Market Derived Outgoings

			Method of Determining Outgoings		
			Valuer uses (rule of thumb) outgoings	Valuer determines outgoings from market evidence	Total
Study Area	Lagos	Count	83	36	119
		% within Lagos	69.7%	30.3%	100.0%
		% within all 3 locations	69.17%	76.6%	71.3%
	Abuja	Count	18	7	25
		% within Abuja	72.0%	28.0%	100.0%
		% within all 3 locations	15.0%	14.9%	15.0%
	Port-Harcourt	Count	19	4	23
		% within Port-Harcourt	82.6%	17.4%	100.0%
		% within all 3 locations	15.83%	8.5%	13.8%
Total		Count	120	47	167
		% for all 3 locations	71.9%	28.1%	100.0%
		% Total	100.0%	100.0%	100.0%

Source: Author's field survey 2012

Table 3 reveals that taking all study areas collectively, 120 (71.9%) respondents make use of easily available (rule of thumb) methods in

determining outgoings as against 28.1% respondents who determine outgoings from a sample of similar properties. Taking each study area individually, 69.7%, 72.0% and 82.6% of respondents in Lagos, Abuja and Port-Harcourt respectively use easily available rule of thumb methods in the determination of outgoings.

Table 4: Available Rental Evidence Versus Market Derived Rental Evidence

			Method of obtaining Rental Evidence		Total
			Use of rule of thumb rental	Use of market derived rental evidence	
Study Area	Lagos	Count	62	57	119
		% within Lagos	52.1%	47.9%	100.0%
		% within all locations	66.7%	77.0%	71.3%
	Abuja	Count	16	9	25
		% within Abuja	64.0%	36.0%	100.0%
		% within all locations	17.2%	12.2%	15.0%
	Port-Harcourt	Count	15	8	23
		% within Port-Harcourt	65.2%	34.8%	100.0%
		% within all locations	16.1%	10.8%	13.8%
Total		Count	93	74	167
		% for all 3 locations	55.7%	44.3%	100.0%
		% Total	100.0%	100.0%	100.0%

Source: Author's field survey 2012

Table 4 presents data on the use of easily available rental evidence versus market surveys. The table reveals that most of the respondents (55.7%) in the entire study areas use easily available rental evidence as against those that determine rental evidence through market surveys. For individual study locations, 52.1 %, 64% and 65.2% of the respondents in Lagos, Abuja and Port-Harcourt respectively adopt easily available rental evidence.

Table 5 Available Yields Versus Market Derived Yields

			Method of Yield determination		Total
			Use of (rule of thumb) yields	Derivation of yield from market evidence	
Study Area	Lagos	Count	75	44	119
		% Within Lagos	63.0%	37.0%	100.0%
		% within all locations	70.8%	72.1%	71.3%
	Abuja	Count	19	6	25
		% within Abuja	76.0%	24.0%	100.0%
		% within all locations	17.9%	9.8%	15.0%
	Port-Harcourt	Count	12	11	23
		% within Port-Harcourt	52.2%	47.8%	100.0%
		% within all locations	11.3%	18.0%	13.8%
Total		Count	106	61	167
		% for all 3 locations	63.5%	36.5%	100.0%
		% Total	100.0%	100.0%	100.0%

Source: Author's field survey 2012

Just like in the two preceding tables, Table 5 reveals that respondents are apt to the use of easily available yield. This is evidence from majority of the respondents, (63.5%), taking all study areas collectively. Individual study areas indicate that 63%, 76% and 52.2% of the respondents in Lagos Metropolis, Abuja and Port-Harcourt respectively adopt easily available yield. Hence respondents are apt in the use of easily available outgoings, rental evidence and yield while carrying out investment method of valuation. They are thus susceptible to availability heuristics.

Representative heuristics

To ascertain whether representative heuristics is practiced, respondents were asked if values they would place on properties with almost identical design would vary very much, marginally or not at all if the design/features of the comparable varied slightly according to any of six indicators. The indicators focused on slight variations such

as a difference in location (but still within the neighbourhood/vicinity); an extra bathroom or toilet; a larger plot size; a bigger parking space; an extra garage or more costly floor and wall finishes. The responses were analyzed with the use of the Relative Important Index (RII).

Table 6 below presents data on the degree to which valuers use representative heuristics, by way of ascribing the same value for properties of identical design, ignoring differences in location of comparables within the neighbourhood/vicinity.

Table 6 Ascribing Same Value to Identical Properties in Different Locations

			Variation in valuation due to different Locations			Total	RII
			W=1 Very Much	W=2 Marginally	W=3 No Difference		
Location of firm	Lagos	Count	47	63	9	119	1.6807
		% within Lagos	39.5%	52.9%	7.6%	100.0%	
		% within all Locations	78.3%	78.8%	33.3%	71.3%	
	Abuja	Count	12	3	10	25	1.92
		% within Abuja	48.0%	12.0%	40.0%	100.0%	
		% within all Locations	20.0%	3.8%	37.0%	15.0%	
	Port-Harcourt	Count	1	14	8	23	2.3043
		% within Port-Harcourt	4.3%	60.9%	34.8%	100.0%	
		% within all Locations	1.7%	17.5%	29.6%	13.8%	
Total		Count	60	80	27	167	1.80
		% within Location of firm	35.9%	47.9%	16.2%	100.0%	
		% within entire Locations	100.0%	100.0%	100.0%	100.0%	

Source: Author's Field Survey 2011

From Table 6 we can see that representative heuristics (which ignores differences in location) does exist in the study areas. Representative heuristics is seen here in the form of valuers ascribing the same or largely the same value for properties of identical design, ignoring differences in location in the study areas, particularly in Port-Harcourt. The RII scores for the study areas were Lagos, 1.6807; Abuja, 1.92; Port-Harcourt, 2.3043. Taking the three study areas together, the overall score was 1.80, which on the 3 point scale represents the use of the heuristic.

Another indicator of representative heuristics investigated is whether valuers ascribe the same value to properties of identical design, ignoring the only difference - an extra bathroom or toilet in the comparable property. Table 7 presents details of the responses in this regard.

From Table 7 we can see that representative heuristics does exist for prototype property which is differentiated by an extra bathroom or toilet. This is the case in all the three study areas particularly in Port-Harcourt. The RII scores for each study area were as follows: Lagos, 1.882; Abuja, 2.28; Port-Harcourt, 2.39. Taking the entire study areas together, the overall score was 2.012 on a 3-point scale.

The study proceeded to the third indicator – to investigate the existence of representative heuristics for prototype (identical design) property differentiated by plot size variations. Details of the responses in this regard are given in Table 8

Table 7 Ascribing Same Value to Identical Properties Differentiated by an Extra Bathroom or Toilet

			Variation in valuation of stereotype property due to extra bathroom and toilet				RII
			W=1 Very much	W=2 Marginally	W=3 No difference	Total	
Study Area	Lagos	Count	35	63	21	119	1.882
		% within Lagos	29.4%	52.9%	17.6%	100.0%	
		% within all 3 locations	85.4%	75.9%	48.8%	71.3%	
	Abuja	Count	4	10	11	25	2.28
		Expected Count	6.1	12.4	6.4	25.0	
		% within Abuja	16.0%	40.0%	44.0%	100.0%	
		% within all 3 locations	9.8%	12.0%	25.6%	15.0%	
	Port-Harcourt	Count	2	10	11	23	2.39
		% within Port-Harcourt	8.7%	43.5%	47.8%	100.0%	
		% within all 3 locations	4.9%	12.0%	25.6%	13.8%	
Total		Count	41	83	43	167	2.012
		% for all 3 locations	24.6%	49.7%	25.7%	100.0%	
		% Total	100.0%	100.0%	100.0%	100.0%	

Source: Author's Field Survey 2012

From Table 8 we can see that valuers exercise representative heuristics in valuation of stereotype property differentiated by plot size (the collective RII score for the 3 locations was 1.63 which is above the mid-point). However, when we consider the individual RII scores for the 3 locations, we see that the heuristics are more prominent in Abuja. The RII scores were Lagos, 1.59; Abuja, 1.92; Port-Harcourt, 1.57. This is enough evidence to substantiate the collective existence of representative heuristics.

Table 8 Ascribing Same Value to Identical Properties with Disparate Plot Size

			Variation in valuation of stereotype property occasioned by different plot size				
			W=1 Very much	W=2 Marginally	W=3 No Difference	Total	RII
Location of firm	Lagos	Count	64	40	15	119	1.59
		% within Lagos	53.8%	33.6%	12.6%	100.0%	
		% within all 3 locations	69.6%	90.9%	48.4%	71.3%	
	Abuja	Count	12	3	10	25	1.92
		% within Abuja	48.0%	12.0%	40.0%	100.0%	
		% within all 3 locations	13.0%	6.8%	32.3%	15.0%	
	Port-Harcourt	Count	16	1	6	23	1.57
		% within Port-Harcourt	69.6%	4.3%	26.1%	100.0%	
		% within all 3 locations	17.4%	2.3%	19.3%	13.8%	
Total		Count	92	44	31	167	1.63
		% for all 3 locations	55.1%	26.3%	18.6%	100.0%	
		% Total	100.0%	100.0%	100.0%	100.0%	

Source: Author's Field Survey 2012

The fourth indicator employed to investigate the use of representative heuristics in the study areas was to ascertain whether valuers would adopt the same values for prototype properties ignoring differences in parking space of comparable stereotype properties. The responses to this indicator are presented in Table 9.

Table 9 Ascribing Same Value to Identical Properties with One Having a Larger Parking Space

			Variation in valuation of stereotype property due to divergent parking space sizes			Total	RII
			W=1 Very Much	W=2 Marginally	W=3 No Difference		
Study Area	Lagos	Count	66	44	9	119	1.52
		% within Lagos	55.5%	37.0%	7.6%	100.0%	
		% within all 3 locations	79.5%	77.2%	33.3%	71.3%	
	Abuja	Count	9	6	10	25	2.04
		% within Abuja	36.0%	24.0%	40.0%	100.0%	
		% within all 3 locations	10.8%	10.5%	37.0%	15.0%	
	Port-Harcourt	Count	8	7	8	23	2.0
		% within Port-Harcourt	34.8%	30.4%	34.8%	100.0%	
		% within all 3 locations	9.6%	12.3%	29.6%	13.8%	
Total		Count	83	57	27	167	1.66
		% for all 3 locations	49.7%	34.1%	16.2%	100.0%	
		% Total	100.0%	100.0%	100.0%	100.0%	

Source: Author's Field Survey 2012

From Table 9 we deduce that representative heuristics does exist for prototype properties with diverse parking space in the study areas. The Relative Important Index scores for each study area were as follows (Lagos, 1.52; Abuja, 2.04; Port-Harcourt, 2.0). The collective score for the three locations was 1.66 which is above the midpoint of the scale of 3.

The fifth indicator employed to investigate the existence of representative heuristics was the inquiry into whether valuers would ascribe the same value to two similar design properties where one was differentiated by the presence of an extra garage. Table 10 presents the findings in this regard.

Table 10 Ascribing Same Value to Identical Properties while One Possesses an Extra Garage

			Variation in values ascribed to stereotype property where one has an extra garage			Total	RII
			W=1 Very Much	W=2 Marginally	W=3 No Difference		
Study Area	Lagos	Count	31	57	31	119	2.0
		% within Lagos	26.1%	47.9%	26.1%	100.0%	
		% within all 3 locations	81.6%	76.0%	57.4%	71.3%	
	Abuja	Count	5	7	13	25	2.32
		% within Abuja	20.0%	28.0%	52.0%	100.0%	
		% within all 3 locations	13.2%	9.3%	24.1%	15.0%	
	Port-Harcourt	Count	2	11	10	23	2.35
		% within Port-Harcourt	8.7%	47.8%	43.5%	100.0%	
		% within Locations	5.3%	14.7%	18.5%	13.8%	
Total		Count	38	75	54	167	2.1
		% within all 3 locations	22.8%	44.9%	32.3%	100.0%	
		% Total	100.0%	100.0%	100.0%	100.0%	

From Table 10 it is deduced that representative heuristics does exist as valuers indicated that they would ignore the extra garage in all the study areas. The Relative Important Index scores for the 3 locations

were: Lagos, 2.0; Abuja, 2.32; Port-Harcourt, 2.35. The collective score for the 3 locations was 2.1 on a scale of 3 where 3 represents maximum usage of representative heuristics.

The last indicator employed to investigate the existence of representative heuristics was the inquiry into whether valuers in the study areas take into account the effect of costly floor and wall finishes in their valuation of prototype properties. Table 11 provides the details of responses.

Table 11 Ascribing Same Value to Identical Properties while One Possesses High Quality Floor/Wall Finishes

			Variation in valuation due to diverse floor/wall finishes			Total	RII
			W = 1 Very Much	W = 2 Marginally	W = 3 No Difference		
Study Area	Lagos	Count	57	50	12	119	1.62
		% within Lagos	47.9%	42.0%	10.1%	100.0%	
		% within all 3 locations	75.0%	78.1%	44.4%	71.3%	
	Abuja	Count	10	5	10	25	2.0
		% within Abuja	40.0%	20.0%	40.0%	100.0%	
		% within all 3 locations	13.2%	7.8%	37.0%	15.0%	
	Port-Harcourt	Count	9	9	5	23	1.83
		% within Port-Harcourt	39.1%	39.1%	21.7%	100.0%	
		% within all 3 locations	11.8%	14.1%	18.5%	13.8%	
Total		Count	76	64	27	167	1.71
		% for all 3 locations	45.5%	38.3%	16.2%	100.0%	
		% Total	100.0%	100.0%	100.0%	100.0%	

Source: Author's Field Survey 2012

From Table 11 it is deduced that representative heuristics exists, as respondents ascribe the same value to similar properties ignoring differences such as costly, elaborate floor and wall finishes in properties in the study areas. The Relative Important Index scores are as follows Lagos, 1.62; Abuja, 2.0; Port-Harcourt, 1.83. The collective score for the three locations was 1.71 on a scale of 3 which is above half of the scale.

Positivity heuristics

The fourth investigation focuses on positivity heuristics. This heuristics is such that valuers seek market information to confirm their pre-valuation ideas of the value of properties for valuation and avoid the collection of market evidence potentially falsifying such preconceived values. In other words, the study investigated the proposition that valuers would tend to support their preconceived value even when this turns out to be in contrast to market evidence.

This insistence on the pre-evidence value by the concerned valuers is presumably based on a somewhat undue confidence in their professional market experience and predictive ability. The inquiry into the existence or otherwise of this heuristic proceeded in form of two questions: first, respondents were asked if they had come across situations where the values they obtained from market evidence and calculations for a property were below what they initially believed the property could fetch in the market.

The second question was a follow up: respondents were asked what their actions would be in cases where preconceived values exceeded calculated values. The summary of responses on the first question is shown in Table 12.

From Table 12 it is deduced that 135 (80.8%) of the respondents in all three locations have experienced preconceived value varying from calculated value. This attestation cuts across all the three study areas (percentage scores were 84%; 64% and 82.6% in Lagos Metropolis, Abuja and Port-Harcourt respectively).

Table 12 Responses on whether Preconceived Value Exceed Calculated Value

			Preconceived Values exceeding Prices		Total
			Yes	No	
Study Area	Lagos	Count	100	19	119
		% within Lagos	84.0%	16.0%	100.0%
		% within all 3 locations	74.1%	59.4%	71.3%
	Abuja	Count	16	9	25
		% within Abuja	64.0%	36.0%	100.0%
		% within all 3 locations	11.9%	28.1%	15.0%
	Port-Harcourt	Count	19	4	23
		% within Port-Harcourt	82.6%	17.4%	100.0%
		% within all 3 locations	14.1%	12.5%	13.8%
Total		Count	135	32	167
		% for all 3 locations	80.8%	19.2%	100.0%
		% Total	100.0%	100.0%	100.0%

Source: Author's field survey

Table 13 below present's results of the follow up question where respondents were asked what their actions would be in cases where preconceived values exceeded calculated values.

From the responses in Table 13 we note that the only response that indicates the absence of usage of positivity heuristics is the option of adopting the calculated value over preconceived value. We see that those who chose this option are very few – only 11.4% for all the locations taken collectively. Most of the other respondents who answered the question indicated that they would adopt a variety of responses as revealed from the table.

These are all indicative of the positivity heuristics. The results for usage of positivity heuristics in the different locations were as follows: 86.6%; 96% and 91.3% in Lagos, Abuja and Port-Harcourt respectively.

Table 13: Action Taken if Preconceived Value Varies from Calculated Value

		Action taken if preconceived value varies from calculated value					
		Adopt Calculated value	Adjust calculated to expected value	average of expected and calculated value	Discard investment for cost method	Total Response for Positivity Heuristics	Total
Lagos	Count	16	40	33	30	103	119
	% within Lagos	13.4%	33.6%	27.8%	25.2%	86.6%	100.0%
	% within all Locations	84.2%	61.5%	73.3%	78.9%	69.6%	71.2%
Abuja	Count	1	17	5	2	24	25
	% within Abuja	4.0%	68.0%	20.0%	8.0%	96%	100.0%
	% within all Locations	5.3%	26.2%	11.1%	5.3%	16.2%	15.0%
Port-Harcourt	Count	2	8	7	6	21	23
	% within Port-Harcourt	8.7%	34.8%	30.4%	26.1%	91.3%	100.0%
	% within all Locations	10.5%	12.3%	15.6%	15.8%	14.2%	13.8%
Total Count		19	65	45	38	148	167
% within Location of firm		11.4%	38.9%	26.9%	22.8%	88.6%	100.0%
	% within entire Locations	100.0%	100.0%	100.0%	100.0%	100%	100.0%

Based on these figures, the existence of positivity heuristics in all the study areas is substantially validated.

Concluding remark

Looking at the results above, it is evident that all of the four heuristics have been confirmed. We can accordingly state conclusively that not only anchoring and adjustment are in operation amongst Nigerian

valuers as is inadvertently suggested in earlier studies (Adegoke and Aluko, 2007; Adegoke, 2008; Aluko, 2007; Adegoke, Aluko and Ajila, 2012). Rather all the four major heuristics - anchoring & adjustment, availability, representative and positivity influence valuers in the conduct of valuation in the three study areas.

The study has demonstrated that hundred per cent focus hitherto devoted by previous heuristic researchers to anchoring and adjustment was majoring on just one aspect of the major heuristics. Future research should be guided to give more emphasis to the others for a more holistic property valuation heuristic research in Nigeria.

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