

Knowledge and Practice of Valuation Methods by Real Estate Practitioners



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ABSTRACT. Property valuation services provided by real estate practitioners significantly impact global economies because property valuation methods affect the accuracy of the estimates of the market value of real properties. The paper assessed the level of knowledge and extent of practice of real estate practitioners on the valuation methods. Likewise, the study investigated the challenges encountered by respondents in their practice. This descriptive-comparative and correlational study utilized a test questionnaire to measure the level of knowledge and a researcher-made survey instrument to measure the extent of practice on the 98 licensed real estate practitioners. With descriptive and inferential analyses, the findings ascertained respondents' average level of knowledge on both methods of valuation. While for the extent of practice of valuation methods, findings revealed great extent for traditional method while moderate for advanced method. Consequently, significant differences were found when the length of practice of the profession, designation, and educational attainment were used as variables. Results disclosed an inverse relationship between knowledge and practice. The major challenge encountered by real estate practitioners is the influence of property owners in fixing the value of real properties, which hinders a fair, accurate, and ethical valuation.

1.0. Introduction

Inaccurate valuation methods adopted by real estate practitioners were found to cause the global financial crisis in 2007 and 2009 (Duca & Muellbauer, 2014). The 1997 financial crisis in the ASEAN was also traced to inaccurate and unreliable real property valuation (Pinyochatchinda & Walsh, 2015). In the Philippines, the Philippine Valuation Standards (PVS) and the Local Government Code of 1991 (RA 7160) governed property valuation used as the basis of tax collections. The study of Tumbagahan et al. (2021) disclosed very great implementation of valuation principles; however, the finances of local government units rely on the national grants or the internal revenue allotment (Zaragoza & Caelian, 2020), which suggests issues on valuation, hence the conduct of this study.

Studies reviewed focused on the role of real estate practitioners, such as those of Azmi et al. (2014) and Kokot and Gnat (2019) and the valuation of the specific classification of properties by Hicks and Queen (2016) and Crosby and Wyatt (2019). In the Philippines, studies concentrated on models of valuation and problems on taxation by Bencure et al. (2019) and Villaroman (2017), respectively, collections of real property taxes by Zaragoza and Caelian (2020), and implementation of valuation principles by Tumbagahan et al. (2021). There is a dearth of studies focused on the level of knowledge and extent of practice of valuation methods by real estate practitioners; hence, there is a gap in the literature.

This study focused on assessing the level of knowledge and extent of practice of valuation methods by government and private real estate practitioners. It also determined the differences in the level of knowledge and extent of practice of respondents according to variables of designation, educational attainment, and length of practice of the profession. Also, the relationship between knowledge and practice and the challenges encountered by real estate practitioners were investigated.

2.0. Framework of the Study

The study anchored on the Knowledge-Attitude-Practice (KAP) Theory of Reyes and Madrigal (2021), emphasizing that increasing knowledge will influence behavior change and affect the extent of practice. Applying this theory to the valuation profession is demonstrated by the accumulation



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of updated information and know-how that will lead to the accurate and fair implementation of valuation standards in practice. It further means that updated knowledge of valuation methods results in a higher extent of practice.

It also adopted the Theory of Real Estate Valuation by Lawson (2008) that valuation is characterized by economics to understand activities in real estate markets (Yakubovsky & Bychkov, 2018; Zrobek et al. 2016; Abidoeye et al., 2018) as shown in the expertise of practitioners of economic sciences, mathematics, and legal aspects of the profession applied in the valuation practice.

3.0. Methodology

This is a descriptive-comparative and correlational study. The descriptive design was utilized to determine the level of knowledge and extent of practice in the areas of the basis of valuation, concepts, valuation reporting, and disclosure of the traditional and advanced valuation methods and the challenges encountered by real estate practitioners. The descriptive design was appropriate for the study because it described a situation or a given state of affairs regarding the specified variables (Johnson & Kuby, 2012). The study also utilized a comparative design to allow the researcher to examine the differences and patterns within and across cases with different contexts (Goodrick, 2014) using the variables (designation, educational attainment, and length of practice of the profession) of the respondents (Kumar, 2014).

Likewise, a correlational design was used to determine if a relationship exists between knowledge and practice. It measured the extent to which these two variables interact and what type of interaction occurs (Thompson et al., 2005).

The total population is 110, 50 from the government and 60 from the private sector. Using stratified random sampling, 98 real estate practitioners were respondents of the study, 45 from the government, and 53 private real estate practitioners.

A test questionnaire was utilized to measure the level of knowledge, while a researcher-made survey instrument was used to determine the extent of practice. The instrument comprises four parts: Part I is for the profile (educational attainment, length of practice of the profession, and designation) of the respondents, while Part II is the test proper. The level of knowledge was measured on a scale of 1 to 5, with 5 as the highest interpreted very high and 1 as the lowest interpreted very low.

The extent of practice was determined using Likert-type statements based on the provisions of the Philippine Valuation Standards (PVS, 2009). The questions on the extent of practice constituted Part III of the survey instrument, measured on a scale of 1 to 5, with 5 as the highest interpreted very great extent and 1 as the lowest interpreted very poor extent. Part IV is a checklist of the challenges real estate practitioners encounter in the performance of their functions.

Since the test questionnaire was adapted from previous Professional Regulations Commission (PRC) board examinations, it was not subjected to a validity test. Meanwhile, the survey instrument on the extent of practice was validated by ten experts using the Content Validity Ratio (CVR) (Lawshe, 1975). The content validity index was 1.00, which means that the questions were valid. A pilot test to 30 real estate practitioners, who were not respondents to the study, was conducted to measure the reliability of the instruments using Cronbach Alpha coefficients. The reliability score for the level of knowledge was 0.761, and the extent of practice was 0.995, both interpreted as reliable.

For the descriptive problems, the mean and standard deviation were used to determine the level of knowledge and extent of practice of real estate practitioners of valuation methods. Likewise, descriptive analysis was used on the challenges encountered by the respondents using frequency count and percentage distribution. While the problems that determined the differences in the level of knowledge and extent of practice on the traditional and advanced methods of valuation was determined by comparative analysis using the Mann Whitney U tests because the Kolmogorov Smirnov tests revealed the variables knowledge [KS=0.169, p=0.000], traditional method [KS=0.234, p=0.000] and advanced valuation method [KS=0.349, p=0.000] were not normally distributed, hence the use of non-parametric statistical tools. To determine the difference in the extent of practice, Mann Whitney U test was also used since the normality tests revealed that the variable extent of practice in traditional method [KS=0.265, p=0.000] and advanced method [KS=0.247, p=0.000] are not also normally distributed, hence the use of non-parametric statistical tools. Spearman rank correlation was used to determine the relationship between knowledge and practice on methods of valuation.

4.0. Results and Discussion

Level of Knowledge of Real Estate Practitioners of the Valuation Methods

As a whole, the level of knowledge of real estate practitioners of the valuation methods (traditional and advanced) is average. The level of knowledge on the traditional methods was rated higher (M=14.76, SD=1.51) than the advanced methods (M=10.26, SD=1.61), although both are interpreted as average.

The finding indicates that all real estate practitioners have good but limited know-how of the valuation methods attributed to the complexity of the profession, which requires interdisciplinary knowledge, including, among others, the knowledge of the law, mathematics, and economic sciences, as affirmed in the studies of Yakubovsky and Bychkov (2018), and Abidoye et al. (2018).

The rating of a higher mean on the level of knowledge of the traditional methods than the advanced methods of valuation indicates that the traditional methods of valuation are very familiar and widely known to real estate practitioners, as confirmed in the studies of Abidoye et al. (2018); Adetiloye and Eke (2014), and Effiong (2015), attributed to its simplicity and alleged reliability. In contrast, real estate practitioners believe that the advanced methods of valuation are not practical and hard to understand because they involve automation of the valuation process and are considered as machine learning, complex, and require a team of specialists from different fields such as programmers, statisticians, mathematicians, and market analysts, as supported in the studies of Zeicu et al. (2017), Demirci (2021), Chaphalkar and Dhatunde (2015), Shetty et al. (2020), and Hargrave and Karnoupakis (2020).

When respondents were grouped in terms of designation, the findings revealed a slightly higher mean rating on the level of knowledge of government real estate practitioners over the private practitioners attributed to attendance to training (Munez, 2016) and higher education, which the government funds (Tumbagahan et al., 2021).

As to educational attainment, college graduates were rated with a slightly higher mean over postgraduate degree holders, although both are average because college graduates were found to be holders of specialized degrees in economics, mathematics, law, and engineering that are technical skills. The findings are supported by studies of Jiang et al. (2013) and Zrobek et al. (2016).

On the other hand, for the length of practice of the profession, a slightly higher mean of real estate practitioners with a shorter length of practice was discovered attributed to the latest insights gained from education from specialized courses appropriate to the profession (Jiang et al., 2013; Zrobek et al., 2016). In contrast, real estate practitioners with a longer length of practice revealed a lower mean rating on the level of knowledge aligned with the study of Warren-Myers (2013) that several years of practice is considered only a minimum requirement in the valuation profession. However, the finding contradicts the study of Preveden (2015), who claimed that higher professional education supported by several years of practice is considered a requirement in the successful practice of the valuation profession.

Table 1. Level of Knowledge of Real Estate Practitioners

Variables	Traditional			Advanced			Knowledge		
	M	SD	Int	M	SD	Int	M	SD	Int
Designation									
Gov't. Practitioner	15.12	2.00	Av	11.20	1.23	Hi	26.31	3.08	Av
Private Practitioner	14.46	0.82	Av	9.46	1.47	Av	23.92	1.75	Av
Educ. Attainment									
College Graduate	14.86	1.75	Av	11.09	1.04	Hi	25.95	2.62	Av
Postgraduate	14.56	0.75	Av	8.41	1.02	Av	22.97	1.64	Av
Length of Practice									
Shorter	15.03	1.75	Av	10.03	1.81	Av	25.05	3.22	Av
Longer	14.24	0.64	Av	10.73	0.99	Av	24.97	1.32	Av
As a whole	14.76	1.51	Av	10.26	1.61	Av	25.03	2.73	Av

Note: M=Mean, SD=Standard Deviation, Int=Interpretation, Av=Average, Hi=High

Extent of Practice of the Traditional Methods

As a whole, the extent of practice of real estate practitioners of traditional valuation methods is great (M=4.17, SD=0.81); emphasized by Grover (2016), substantiated by Abidoye et al. (2018), that the cost, income, and sales comparison approaches, which are traditional methods of valuation, are the most commonly adopted. However, Adetiloye and Eke (2014) claimed that using the sales comparison approach is subjective.

Table 2. Extent of Practice of Real Estate Practitioners in Traditional Methods

Variables	Basis of valuation			Concepts			Valuation Reporting			Disclosure			Traditional Methods of Valuation		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
<i>Designation</i>															
Government Practitioner	4.15	0.80	G	4.13	0.79	G	4.02	0.92	G	3.99	0.99	G	4.07	0.86	G
Private Practitioner	4.44	0.64	VG	4.38	0.59	VG	4.15	0.96	G	4.02	0.87	G	4.25	0.76	VG
<i>Educational Attainment</i>															
College Graduate	4.10	0.66	G	4.09	0.66	G	3.79	0.90	G	3.78	0.94	G	3.94	0.77	G
Postgraduate	4.76	0.65	VG	4.66	0.62	VG	4.76	0.65	VG	4.53	0.67	VG	4.68	0.64	VG
<i>Length of Practice</i>															
Shorter (65)	4.49	0.76	VG	4.44	0.74	VG	4.48	0.80	VG	4.38	0.83	VG	4.45	0.77	VG
Longer (33)	3.93	0.47	G	3.91	0.42	G	3.32	0.71	M	3.27	0.62	Mo	3.61	0.54	G
<i>Whole</i>	4.30	0.73	VG	4.26	0.70	VG	4.09	0.94	G	4.01	0.93	G	4.17	0.81	G

Note: Mo=Moderate, G=Great, VG=Very Great

In terms of the areas, the basis of valuation is rated very great; it demonstrates that real estate practitioners ensure that the estimate of market value is based on market-derived data using appropriate methods and techniques (Adetiloye & Eke, 2014). Meanwhile, disclosure is rated great only, indicating that the real estate practitioners do not always inform their clients of their roles, as emphasized in Duca and Muellbauer (2014) and Pinyochatchinda and Walsh (2015).

When respondents were grouped in terms of the variable designation, private real estate practitioners were rated very great. In contrast, government real estate practitioners were rated only great, as explained by the limited practice of government real estate practitioners that follow the formula and guidelines imposed by the government regulations (Tumbagahan et al., 2021; Zrobek et al., 2016).

Meanwhile, in terms of the variable educational attainment, the higher extent of practice of the traditional valuation methods by holders of postgraduate degrees than college graduates demonstrates that education plays a significant role in the profession. It also implies that a holder of higher education has a knowledge base drawn from their know-how of analyzing between cases of valuation, matching them, and choosing better comparable properties because of their expertise to scrutinize and evaluate market details (Preveden, 2015).

As to the length of practice of the profession, those practicing for shorter periods were rated very great. In contrast, those longer in practice were rated great only, demonstrating the need to update knowledge considering that the real estate profession has been evolving over the years, as affirmed in the studies of Yakubovsky and Bychkov (2018) and Zrobek et al. (2016) while knowledge of those shorter years in practice is updated having earned this knowledge from appropriate courses. However, the finding contradicts Abidoye et al. (2018) and Malkowska et al. (2019), who believed that longer years of practice are necessary for the valuation profession just like any other profession.

Extent of Practice of the Advanced Methods

As a whole, the extent of practice of the advanced valuation methods is to a moderate extent (M=3.31; SD=1.58) indicative of how limited is the adoption of these methods, and practitioners have not embraced and adopted the advanced methods in practice, as supported by Du et al. (2014), Chaphalkar and Dhatunde (2015), Shetty et al. (2020), and Hargrave and Karnoupakis (2020). Further, Zeicu et al. (2017) and Chan and Abidoye (2019) all affirmed that advanced valuation methods require a team of specialists from different fields to develop and operate the system and a historical database other than training of real estate practitioners, hence not widely adopted.

Table 3. Extent of Practice of Real Estate Practitioners in Advanced Methods

Variables	Basis of valuation			Concepts			Valuation Reporting			Disclosure			Advanced Methods of Valuation		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
<i>Designation</i>															
Government Practitioner	3.14	1.46	Mo	3.23	1.17	Mo	3.49	1.34	G	3.23	1.25	Mo	3.27	1.28	Mo
Private Practitioner	3.16	1.72	Mo	3.38	1.83	Mo	3.44	1.88	G	3.37	1.83	Mo	3.34	1.81	Mo
<i>Educational Attainment</i>															
College Graduate	2.68	1.61	Mo	2.72	1.48	Mo	2.89	1.63	Mo	2.73	1.52	Mo	2.76	1.54	Mo
Postgraduate	4.18	0.96	G	4.63	0.63	G	4.76	0.65	VP	4.58	0.76	VG	4.54	0.74	VG
<i>Length of Practice</i>															
Shorter (65)	3.91	1.15	G	4.10	0.89	G	4.31	0.92	VP	4.09	0.97	G	4.10	0.95	G
Longer (33)	1.64	1.25	VP	1.76	1.41	VP	1.81	1.49	P	1.74	1.39	VP	1.74	1.38	VP
<i>Whole</i>	<i>3.15</i>	<i>1.60</i>	<i>Mo</i>	<i>3.31</i>	<i>1.55</i>	<i>Mo</i>	<i>3.47</i>	<i>1.65</i>	<i>Hi</i>	<i>3.30</i>	<i>1.58</i>	<i>Mo</i>	<i>3.31</i>	<i>1.58</i>	<i>Mo</i>

Note: Mo=Moderate, G=Great, VG=Very Great, VP=Very Poor

As to area, valuation reporting was rated highest interpreted to a great extent, implying adherence of real estate practitioners to the international valuation standards, which strengthened the recommendations of the International Association of Assessing Officers (IAAO, 2013) on the adoption of mass appraisal techniques. The finding is congruent with the studies of Murphy et al. (2012) and Bellman and Lind (2018) that valuation is regulated where standards for professional education were established, and observance of a code of conduct is required.

Meanwhile, the area basis of valuation was rated lowest and interpreted to a moderate extent, implying that real estate practitioners do not follow market-derived data, a major and essential characteristic of valuation, but use artificial intelligence models and complex integrated statistical methods (Zeicu et al. 2017), which are not reliable and accurate (Chan & Abidoye, 2019). Also, it was articulated in the study of Kucharska-Stasiak (2013) that valuation is only an estimate which depends on the assumptions adopted by real estate practitioners.

When grouped in terms of the variable designation, private real estate practitioners were rated slightly higher than government real estate practitioners. Both were interpreted as moderate because government real estate practitioners are bound to implement and strictly follow laws and regulations (Tumbagahan et al., 2021).

In terms of educational attainment, holders of postgraduate degrees were rated very great extent while college graduates were rated as moderate extent, signifying that education plays a very significant role in the practice of the advanced methods of valuation profession, as affirmed by Preveden (2015) that those with higher levels of education, such as postgraduate degrees, possess a higher level of understanding of valuation methods. The study of Beale (2015) reinforced the finding that clients expressed lesser influence on practitioners with a higher level of education.

In terms of length of practice of the profession, those who have a shorter length of practice were rated higher interpreted great, while those longer in practice were rated very poor extent, implying that those who have been practicing for longer years and have not updated their knowledge hold on to their old practices and refuse to accept the change in valuation methods. This is consistent with Zeicu et al. (2017) that advanced methods are considered machine learning, which uses automation that those who are longer in the practice of the profession are not used to.

Difference in the Level of Knowledge on Methods of Valuation

There is no significant difference in respondents’ level of knowledge on the traditional methods of valuation when they are grouped according to educational attainment [U=1152.000, p=0.340]. This indicates that both respondents are familiar and knowledgeable of the traditional valuation methods, disclosed by Abidoye et al. (2018).

Table 4A. Difference in the Level of Knowledge of Real Estate Practitioners

Variables	Traditional Methods		
	U	Z	p
Designation	984.500*	-3.284	0.001
Length of Practice	760.000*	-3.936	0.000
Educational Attainment	1152.000	-0.954	0.340

Note: *the difference is significant when p<0.05

Table 4B. Difference in the Level of Knowledge of Real Estate Practitioners

Variables	Advanced Methods		
	U	Z	p
Designation	544.000*	-6.334	0.000
Length of Practice	1092.000*	-1.799	0.000
Educational Attainment	166.500	-8.009	0.072

Note: *the difference is significant when $p < 0.05$

Table 4C. Difference in the Level of Knowledge of Real Estate Practitioners

Variables	Overall Knowledge on Valuation Methods		
	U	Z	p
Designation	535.000*	-5.949	0.000
Length of Practice	1319.000	-0.204	0.838
Educational Attainment	271.500*	-6.758	0.000

Note: *the difference is significant when $p < 0.05$

However, there is a significant difference in respondents' level of knowledge on traditional valuation methods when they are grouped according to designation [$U=984.500$, $p=0.001$] and length of practice of profession [$U=760.000$, $p=0.000$]. The significant difference as to designation implies that real estate practitioners have differing levels of knowledge on the valuation of real properties, as supported by the study of the IAAO (2013) and Murphy et al. (2012) that government real estate practitioners should adhere to the adoption of standardized methods and the code of ethics, but are not imposed upon private real estate practitioners.

Meanwhile, the significant difference in terms of length of practice of the valuation profession under the traditional methods of valuation is supported by Bellman and Lind (2018) that international demands for valuation are becoming more complex, revealing that those who are shorter in the practice of the profession possess more knowledge due to exposure to specialized appropriate courses and these practitioners are willing to be paid at lower rates, while those who have longer years of practice are not very active in the practice of the profession but instead opt to become consultants, resource persons, and professors where the higher pay is available rather than the practice in valuation aligned with the study of Malkowska et al. (2019).

While, there is no significant difference in respondents' level of knowledge on the advanced valuation methods when they are grouped according to educational attainment [$U=1092.000$, $p=0.072$]. This is attributed to the findings that both groups of real estate practitioners are not comfortable and reluctant to use the advanced methods of valuation, confirming the studies of Du et al. (2014), Shetty et al. (2020), and Hargrave and Karnoupakis (2020).

While there is a significant difference in respondents' level of knowledge on advanced valuation methods when they are grouped according to designation [$U=544.000$, $p=0.000$] and length of practice of profession [$U=166.500$, $p=0.000$].

As to designation, the difference is significant because government real estate practitioners are privileged to attend training, seminars, and higher education funded by the government, hence possessing updated knowledge. This finding of a significant difference in terms of designation substantiated the study of Tumbagahan et al. (2021), which found a very great extent of implementation of assessment principles and valuation of real properties. The findings also affirmed studies of Zrobek et al. (2016) that property valuation should be accurate in government because the real property tax is the main source of revenue for local governments.

As to the length of practice of the profession, the significant difference in the level of knowledge is noted that for the new graduates whose length of practice is shorter, the use of computer-aided advanced property valuation methods is earned in schools, while those longer in the service are not familiar and used to advanced technology compared to the new graduate practitioners, as disclosed in the study of Zeicu et al. (2017), however contrary to findings of Malkowska et al. (2019) and Abidoeye et al. (2018).

Difference in the Extent of Practice of Traditional Methods of Valuation

There is no significant difference in the extent of respondents' practice on traditional valuation

methods when grouped according to designation [U=1395.000, p=0.502]. However, there are significant differences when grouped according to the length of practice of profession [U=606.000, p=0.000] and educational attainment [U=788.000, p=0.001].

The no significant difference in the extent of respondents' practice of traditional valuation methods when grouped according to designation implies that both groups of respondents used the traditional valuation methods being standard methods adopted in practice, supported by the study of Chan and Abidoye (2019).

Meanwhile, the significant difference when grouped according to the length of practice of profession strengthened the study of Abidoye et al. (2018) and Malkowska et al. (2019) that the practice of the valuation profession depends on the real estate practitioners' years of experience because meaningful inference could be earned from years of practice.

Also, the significant difference when grouped according to educational attainment is revealed by real estate practitioners with postgraduate studies whose practice of the traditional valuation methods is greater than the other groups of respondents, indicating that educational attainment counts in real estate practice. This corroborates the study of Jiang et al. (2013) that the valuation profession requires high educational qualifications due to globalization and cross-border investments.

Table 5. Difference in the Extent of Practice of Traditional Methods

Variables	U	Z	p
Designation	1395.500	-0.672	0.502
Length of Practice of the Profession	606.000*	-4.844	0.000
Educational Attainment	788.000*	-3.353	0.001

Note: *the difference is significant when $p < 0.05$

Difference in the Extent of Practice on Advanced Methods

There is no significant difference in the extent of practice of real estate practitioners on advanced methods of valuation when they are grouped according to designation [U=1192.000, p=0.057]. However, there are significant differences when grouped according to the length of practice of profession [U=322.500, p=0.000] and educational attainment [U=294.000, p=0.000].

The no significant difference in the extent of practice of respondents on advanced methods of valuation when grouped according to designation implies that both groups of real estate practitioners rarely adopt these methods, is acknowledged in the study of Abidoye et al. (2018) that all real estate practitioners seldom adopt the advanced methods in practice; hence such practice did not prosper, although there is a wide application and excellent results in theory.

While there is a significant difference when grouped according to the length of practice of the profession in the advanced methods, as found that real estate practitioners with shorter experience have a significantly higher extent of practice in advanced methods because of the adoption of automated valuation. Preveden (2015) averred that experience is the only minimum requirement in the successful practice of the profession. Hence those with shorter years of practice are more engaged in the practice because of the application of the latest technology earned thru education.

As to educational attainment, the significant difference is registered in the higher extent of practice where holders of postgraduate degrees were rated higher than college graduates signifying that education plays a very significant role in the practice of the advanced methods of valuation profession, as affirmed by Preveden (2015) that those with higher levels of education possess a higher level of understanding of valuation methods. The study of Beale (2015) reinforced the finding that clients expressed lesser influence on practitioners with a higher level of education.

Table 6. Difference in the Extent of Practice of Advanced Methods

Variables	U	Z	P
Designation	1192.500	-1.900	0.057
Length of Practice of the Profession	322.500*	-6.608	0.000
Educational Attainment	294.000*	-6.559	0.000

Note: *the difference is significant when $p < 0.05$

Relationship between Knowledge and Practice of Methods of Valuation

There is a significant inverse relationship between knowledge and practice in terms of traditional [$\rho (108) = -0.334, p=0.000$] and advanced [$\rho (108) = -0.339, p=0.000$] methods of valuation.

The finding of a significant inverse relationship between knowledge and practice implies a gap between property valuation theory and practice. This finding demonstrates that insufficient knowledge results in the imprecise practice of the traditional methods, which demonstrates an inverse relationship.

While in the advanced methods, sound knowledge results in modest or less engagement in practice, an inverse significant relationship between knowledge and practice.

These findings validate the theory of the researcher that updated knowledge will lead to excellent practice. Likewise, the KAP theory confirms that increasing knowledge will lead to behavior change and affect the extent of practice. The inverse relationship was due to the absence of increased and updated knowledge.

This finding reinforced the study of Abidoye et al. (2018) and Chan and Abidoye (2019) that knowledge of real estate practitioners did not translate to practice. Also, Adhikari and Agrawal (2013) concluded that researchers widely adopt advanced property valuation methods only to establish their suitability for property valuation.

Table 7. Relationship between Knowledge and Practice on Methods of Valuation

Methods of Valuation	ρ	df	p
Traditional	-0.334*	108	0.000
Advanced	-0.339*	108	0.000

Note: *Correlation is significant at the $p < 0.05$

Challenges Encountered by Real Estate Practitioners

The major challenge encountered by real estate practitioners is the influence of property owners in fixing prices in private valuation transactions while in the schedule of market values in the case of government practitioners expressed by all respondents (Tumbagahan et al., 2021). The lack of adequate information and data resulting from withholding market information due to the Data Privacy Act and avoidance of payment of obligations to government is another challenge acknowledged by Bencure et al. (2019) and Effiong (2015), whom both concurred that there is uncertainty and inaccuracy due to inadequate and unreliable data.

The absence of standards in valuation and policy issues find support in the studies of Tichaona and Nyaruwata (2014) and Miciula et al. (2020). The enactment of RA 9646, otherwise known as "The Real Estate Service Act," need to be reviewed and strengthened. Other challenges such as weak enforcement, administrative concerns, and lack of political support are aligned with the studies of Subedi (2016) and Tumbagahan et al. (2021).

Table 8. Challenges Encountered by Real Estate Practitioners

Challenges	f	%
Influence of property owners in fixing prices	98	100.0
Lack of adequate information and data	96	97.9
Absence of standards in valuation	64	65.3
Influence in the schedule of market value for taxation purposes	56	57.14
Lack of political support	46	46.94
Policy issues	46	46.94
Administrative concerns	41	41.83
Weak enforcement	32	35.95

5.0. Conclusion

The level of knowledge of real estate practitioners of the valuation methods (traditional and advanced) as a whole is only average, implying inadequate understanding and wisdom that affected the quality of valuation practice demonstrating the absence of clear and practical standards earned from appropriate education that enhance the process, demonstrating the need for standardization and the formal adoption or creation of valuation standards that are enforceable by local ordinances and regulations.

There was no significant difference in the level of knowledge on traditional and advanced methods of valuation in terms of educational attainment. At the same time, there were significant differences when respondents were grouped according to designation and length of practice of the profession. As to the extent of practice, there was no significant difference in terms of designation, but there were significant differences in terms of education and length of practice of the profession. These results indicate an opposite relationship between knowledge and practice.

Despite the numerous excellent results on the use of advanced valuation methods in practice, real estate practitioners are still comfortable adopting the traditional valuation methods since the use of advanced technology is a threat to their jobs, which explains the inverse significant relationship between knowledge and practice. Hence, continuing education and appropriate training affect the extent of practice of real estate practitioners of the advanced methods of valuation.

To achieve a sustainable property valuation practice, stakeholders may devise strategies to promote the know-how and the adoption of advanced property valuation methods, thereby bridging the gap between theory and practice as there is an urgent need to overhaul the practice by developing information technology and data analysis skills of real estate practitioners because end-users might be demanding impeccable services that the current traditional methods of valuation may not be responsive to.

The challenges encountered focused on issues in valuation implying inadequate knowledge due to lack of training, inappropriate higher education, and a weak institutional framework. The findings may be used as baseline information for a proposed capability-building program to enhance the level of knowledge and improve the practice of real estate practitioners toward a fair, accurate, and ethical valuation of real properties.

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