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Truth Theory and Contingency Theory in the Implementation of Integrated Reporting: A Structural Analysis

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ABSTRACT

This study examines the role of truth theory and contingency theory in explaining the implementation of integrated reporting (IR). The research design was a quantitative systematic literature review, with unit analyses of 170 articles with the theme of IR. The findings showed there were three of research evidences. First, the truth theory and contingency theory can play a role in explaining the difference in IR implementation. Second, convergence truth theory influences contingency theory with contingency in the IR implementation in organizational reporting systems. Third, semantic truth theory affects the IR implementation. While, the International Integrated Reporting IR Framework is not yet supported by reporting standards, nonetheless with the acceptable benefits of IR Framework, could be applied to various forms of organization. This study provides insight to stakeholders of the IIRC to strengthen the normative role into pragmatic role in various development scenarios of global reporting, concerning IR implementation through business practices and global reporting entities, including for the region in Indonesia.

INTRODUCTION

Integrated reporting IR system initiated by the International Integrated Reporting Council (IIRC, 2011) entered the global implementation phase starting in 2020. The IR system, which refers to the international integrated reporting framework IRF (IIRC, 2013), has become the global norm for reporting systems (IIRC, 2018). A system that can communicate value creation over time in line with efforts to achieve sustainable development goals. Therefore, it is important to assess IR implementation in line with the timeframe of IIRC (IIRC, 2019), and according to the design roadmap that has been developed for IRF implementation (PwC, 2019). This has created momentum to achieve IR implementation, from voluntary implementation to mandatory implementation globally.

The Integrated Reporting Framework IRF guidelines for compliance with the IR process have the advantage of creating value over time (Adams, 2015). Normatively, the fulfilment of IR Framework implementation within IR requires stakeholders from the IIRC (2018, 2019) who interact and engage meaningfully (Jeffery, 2009). The IR implementation as an international corporate reporting initiative emerged to overcome the limitations of existing corporate reporting approaches, which were generally criticized for being multiple and disjointed between each reporting system. In this context, although IR is gaining popularity, its current momentum is still limited due to the lack of clear evidence of its benefits. In addition, the integrated reporting system still faces challenges, such as meeting the availability of IR reporting standards as a technical guideline from the IR Framework (IIRC, 2018; IIRC, 2019).

The level of implementation of the integrated reporting system in the regional context of Indonesia, can be seen from the achievements in various implementation criteria (Payne, 2008; Deloitte, 2015). This research was conducted to answer three questions related to the IR implementation by variables from truth theory and contingency theory, with these following formulations:

- (i) Is there a difference in IR implementation due to the role of information, knowledge of coherence, correspondence, pragmatic, convergence, semantic and contingency?
- (ii) What are the relationships of information, knowledge of coherence, correspondence, pragmatic, convergence, semantic towards contingency in the IR implementation?
- (iii) What are the relationships between information knowledge of coherence, correspondence, pragmatic, convergence, semantic and contingency in the IR implementation towards the implementation level of IR

In this regard, the results of this study are expected to contribute to the development of literature and practice by providing evidence in the application of an IR system.

1. HYPOTHESIS DEVELOPMENT

There is a relationship between implementation theories (Nilsen, 2015) that can be applied as an antecedent and as a consequence of IR implementation (Ara & Harani, 2020). Reference is also made to several related studies that have not concluded how the IR implementation is fulfilled in the context of truth theory and contingency theory to build this hypothesis. The proposition of the coherence theory of truth is built from the perspective of the relationship between conceptual firm performance and value relevance of disclosure in IR, and of the relationship of the role of legitimacy theory with IR (Roman et al., 2019). The proposition of the correspondence theory of truth was put forward, referring to the factors that have emerged from the political, cultural and economic with the voluntary adoption of IR (Dragu & Tiron-Tudor, 2013). The proposition of convergence truth theory is based on the need for stakeholder support and coordination between IIRC stakeholder groups (Potter et al., 2013). For Indonesia, the convergence path is needed in the direction of reporting integration for each form of reporting through the reporting system that has been implemented in organizations (Tjahjadi et al., 2020). Further, in Indonesia, although there are regulatory references regarding reporting practices for corporate responsibility, the regulations are not fully aimed at approaching the practice of IR (Adhariani & De Villiers, 2019). Semantic truth theory has been proposed, and the meaning is similar to integrated thinking (IT) and IR (Dumay & Dai, 2017). The proposition of contingency theory takes the perspective of the role of IR in the implementation of organizational reporting (Barth et al., 2017). To determine the role of truth theory and the role of contingency theory, following three hypotheses were proposed:

H1: There is no difference in the implementation level of IR due to the role of informational knowledge of truth theory (coherence, correspondence, pragmatic, convergence, semantic) and contingency theory.

H2: There is no relationship between the role of truth theory information and knowledge (coherence, correspondence, pragmatic, convergence, semantic) towards contingency in IR implementation.

H3: There is no relationship between the role of truth theory information and knowledge (coherence, correspondence, pragmatic, convergence, semantic) and contingency in IR implementation towards implementation level of IR.

2. RESEARCH METHOD

2.1 Design and Procedure

This study used a systematic literature review to examine articles about (IR). Theoretical assessments, narrative reviews and meta-analyses were examined to study IR implementation. The structure was followed when studying each article as a source of information for identifying the research data mentioned in the articles reviewed. The data were searched in the reviewed articles according to the research variables and indicators. Next step was to present operationalizing the systematic review of the research to find information and knowledge about truth theory and contingency theory that are mentioned in the reviewed articles. The study used a procedural and critical approach to review the literature and seeks to express findings empirically.

2.2 Data collection

Data collection was carried out through various reference sources available on the ASEAN Citation Index, the ScienceDirect database, the Ebsco database, and the Scopus database. Article data were collected related to the IR unified reporting theme. In total, 170 articles published from 2013 to 2021 were examined. Table 1 presents the composition of the articles studied in the systematic literature review. Articles were published in journals, book chapters, conference papers, proceedings and other publications.

Table 1. Journal references and proceeding

<i>Year of Publication</i>	<i>Reference to</i>		<i>Amount</i>
	<i>Journal</i>	<i>Proceeding / others</i>	
2013	8	3	11
2014	8	5	13
2015	19	1	20
2016	14	2	16
2017	21	7	28
2018	25	3	28
2019	16	3	19
2020	25	3	28
2021	7	0	7
Amount	143	27	170

Source: Data processed, 2021

2.3 Variables and measurement

Variables with indicators and indicator items used in the study are presented in Table 5. Indicator measurement is carried out in two stages. First, the indicator items are measured using a dummy variable with a nominal scale (0 and 1). A score of 1 is given if information from an indicator is stated explicitly or implicitly in the article being reviewed, and a score of 0 is given if information on an indicator item is not mentioned in the article. The results of measuring data using a nominal scale are used to test hypotheses on the difference in the implementation level of IR. Second, based on nominal measurement data, it is then transformed with measurement criteria in interval scale criteria. It refers to the suitability of research methods in the main choice of constructs, measurements, model specifications and data analysis, which describes the critical steps in conceptualizing and conducting multilevel research (Table 2).

Table 2. Variables with indicators and scale of measurement

<i>Variables & indicators</i>	<i>Acronym</i>	<i>Operational definition of variables</i>	<i>Scale</i>
<i>Independent variables:</i>			
<i>Role of truth theory</i>			
Coherence truth theory	CohTT	Information knowledge of coherence truth theory (SEP, 2018).	Nominal & Interval
Correspondence truth theory	CorTT	Information knowledge of correspondence truth theory (David, 2016).	Nominal & Interval
Pragmatic truth theory	PraTT	Information knowledge of pragmatic truth theory (SEP, 2021)	Nominal & Interval
Convergence truth theory	ConTT	Information knowledge of convergence truth theory (Roco, 2016).	Nominal & Interval
Semantic truth theory	SemTT	Information knowledge of semantic truth theory (Pagin, 2016)	Nominal & Interval
<i>Independent and intervening variable:</i>			
<i>Role of contingency theory</i>			
	RoCT	Contingency in IR implementation be measured by five contingency roles: as configuration, as complementary, as suppressing complexity, as creative design, as diversity of performance (Van de Ven et al., 2013)	Nominal & Interval
<i>Dependent variable:</i>			
<i>The implementation level of IR</i>			
	IloIR	Information knowledge of the fulfillment implementation theories within process and achievement of integrated reporting (Nilsen, 2015; IIRC, 2018; IIRC, 2019)	Nominal & Interval

Source: own

2.4 Data Analysis

The results of direct measurement of indicator items from the reference articles reviewed were used for data analysis. The results of the analysis were used to assess the propositions in the three hypotheses. This was done, first, to test whether there are differences in the IR implementation due to the role of theory of truth and contingent theory and, second, by stating the relationship and significance between the theory of truth and the role of contingent theory towards IR implementation. For data analysis and hypothesis testing (H_1), non-parametric statistical test tools used the chi-square fit test or the chi-square independence test. To test the second and third hypotheses, path analysis was used to determine the relationships between research variables (Hair et al., 2006). Thereby, the model specification to answer the research question is presented in the following these structural relationships

$$ConIRI (Y_1) = pY1X1 CohTT + pY1X2 CorTT + pY1X3 PraTT + pY1X4ConTT+ pY1X5 SemTT+ \varepsilon_1$$

..... (1)

$$ILOIR (Y_2) = pY2Y1 ConIRI + pY2X1 CohTT + pY2X2 CorTT + pY2X3 PraTT + pY2X4 ConTT+ pY2X5 SemTT+ \varepsilon_2$$

..... (2)

3. RESULTS

3.1 Descriptive Analysis

The results showed that IR sub-themes included implementation-challenge aspects with 45 articles, (IR)/(IRF), the six capitals of IR with 34 articles, Corporate Social Responsibility (CSR), Environmental Social Governance (ESG) and Sustainability Reporting (SR) with IR 23 articles, emergence and adoption IR with 16 articles, legal aspect/audit control with 15 articles, IR research with 11 articles, financial reporting and annual reports with 8 articles, role of theories with 5 articles, stakeholder engagement with 5 articles, integrated thinking with 4 articles and accounting curriculum development for IR with 4 articles. The

geographic contexts were distributed, and most of the articles were written with reference to a global context (Figure 2).

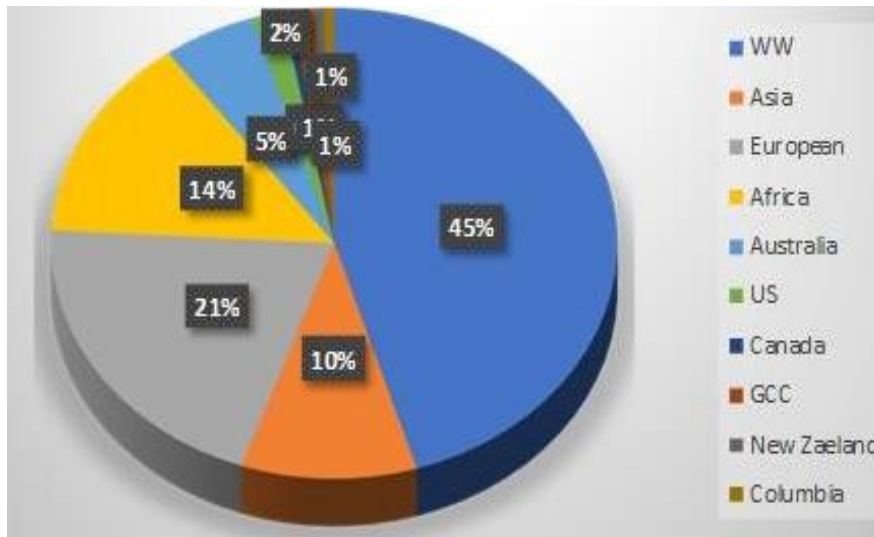


Figure 1. Articles in geographic context (continent/country)

3.2 Hypothesis Testing

A difference test was carried out by comparing observation frequency with frequency of expectations according to the measurement data in Table 3.

Table 3. Observation frequency (OF) and Expectation Frequency (EF)

Implementability	CohTT	CorTT	PraTT	ConTT	SemTT	ConIRI	ILoIR	Amount
Excellent (Score 5)	31	31	59	50	35	80	94	206
EF	41.2	41.2	41.2	41.	41.2	41.2	41.2	
Good (Score 4)	16	73	62	31	96	46	25	278
EF	55.6	55.6	55.6	55.6	55.6	55.6	55.6	
Moderate (Score 3)	86	57	36	49	33	21	28	261
EF	52.2	52.2	52.2	52.2	52.2	52.2	52.2	
Low (Score 2)	37	9	13	29	6	23	22	94
EF	18.8	18.8	18.8	18.	18.8	18.8	18.8	
Bad (Score 1)	0	0	0	11	0	0	1	12
EF	2.4	24	2.4	2.4	2.4	2.4	2.4	
Amount	170	170	170	170	170	170	170	850

Source. own

The values of Chi-square observations in Table 4 were used to test whether there is a role of truth theory and contingency theory in differentiating the implementation level of IR (Figure 1). As shown in Table 7, the result of the X^2 observation has a value of 161.1262. Meanwhile, X^2 was determined by referring to the degrees of freedom of row by column (5-1) (7-1) with a significance level of 0.05. According to this approach, the distribution value of the chi-square table is 36.415. The X^2 observations with a value of 161.1262 are greater than the value of X_2 at 36.415. This means that H1 is rejected with a chi-square significance value <0.05 . The results of testing this hypothesis indicate that there are differences in IR implementation due to the role of truth theory description (coherence, correspondence, pragmatic, convergence, semantic) and the role of contingency in IR implementation.

Table 4. Chi-Square observation value

Variables	CohTT	CorTT	PraTT	ConTT	SemTT	ConIRI	ILoIR	Amount
	-10.2	-10.2	17.8	8.8	-6.2	-126	52.8	
	104.04	104.04	316.84	77.44	38.44	15876	2787.84	
X2 Observation	2.5252	2.5252	7.6902	1.8796	0.9330	77.0679	67.6660	14.6204
	-39.6	17.4	6.4	-24.6	40.4	-9.6	-30.6	
	1568.16	302.76	40.96	605.16	1632.16	92.16	936.36	
X2 Observation	28.2043	5.4453	0.7367	10.8842	29.3554	1.6576	16.8410	45.2705
	33.8	4.8	-16.2	-3.2	-19.2	-35.2	-24.2	
	1142.44	23.04	262.4	10.24	368.64	1239.04	585.64	
X2 Observation	21.8858	0.4414	5.0276	0.1962	7.0621	23.7364	11.2192	27.5509
	18.2	-9.8	-5.8	10.22	-12.8	4.2	3.2	
	331.24	96.04	33.64	104.04	163.84	17.64	10.24	
X2 Observation	17.6191	5.1085	1.7894	5.5340	8.7149	0.9383	0.5447	30.0511
	-2.4	-2.4	-2.4	8.6	-2.4	-2.4	-1.4	
	5.76	5.76	5.76	73.96	5.76	5.76	1.96	
X2 Observation	2.4	2.4	2.4	30.8167	2.4	2.4	0.8167	43.6333
X2 Observation								161.1262

Source: own

The measurement result of the correlation coefficient in the first structural equation is presented in Table 5. There is a significance of coherence truth theory (X_1) = 0.594, correspondence truth theory (X_2) = 0.328, pragmatic truth theory (X_3) = 0.148 and semantic truth theory (X_5) = 0.081, which indicates a result greater than 0.05. Therefore, the variables X_1 , X_2 , X_3 and X_5 were concluded to have no significant effect on contingency in the IR implementation (Y_1). Meanwhile, the significance of the theory of truth convergence (X_4) = 0.006, which is smaller than 0.05, shows that the theory of truth convergence (X_4) has a significant effect on contingency in IR implementation (ConIRI) (Y_1).

Table 5. First structural equation and model summary

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	T	Sig.
(Constant)	2.638	0.508		5.193	0.000
X1	-0.066	0.123	-0.061	-0.534	0.594
X2	-0.145	0.148	-0.111	-0.981	0.328
X3	0.143	0.098	0.125	1.454	0.148
X4	0.198	0.070	0.233	2.811	0.006
X5	0.238	0.135	0.164	1.756	0.081
Dependent Variable: Y1					
R: 0,365; R-Square: 0.133; Adjusted R Square: 0.107; Std. Error of the Estimate: 1.007					

Source: own

Table 5 shows R square as 0.133, which means the total effect of X_1 , X_2 , X_3 , X_4 and X_5 is 13.3%. The remaining 86.7% is attributed to other factors that influence Y_1 , which have a value of ϵ_1 with 0.9311. The results of hypothesis testing on the results of the first structural equation assessment showed that only convergence truth theory had a significant effect on contingency in IR implementation. Therefore, it was relevant to perform the specifications for the prediction model of contingency in IR implementation within the equation: $ConIRI (Y_1) = pY_1X_4ConTT + \epsilon_1$.

The measurement result of the correlation coefficient in the second structural equation is presented in Table 6. The findings showed the relationship between the role of the theory of truth of coherence, correspondence, pragmatic, convergence, semantic and contingency in IR implementation and prediction of the implementation level of IR.

Table 6. Second structural equation and model summary

<i>Model</i>	<i>Unstandardized Coefficients</i>	<i>Std. Error</i>	<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
(Constant)	1.892	0.587		3.223	0.002
X1	0.055	0.132	0.048	0.415	0.678
X2	-0.176	0.158	-0.126	-1.108	0.270
X3	0.060	0.106	0.049	0.566	0.572
X4	0.077	0.077	0.085	0.993	0.322
X5	0.429	0.146	0.278	2.927	0.004
Y1	0.124	0.084	0.117	1.484	0.140
Dependent Variable: Y2					
R: 0,364; R-Square: 0.125; Adjusted R Square: 0.093; Std. Error of the Estimate: 1.079					

Source: own

Table 6 shows coherence truth theory (X_1) = 0.678, correspondence truth theory (X_2) = 0.270, pragmatic truth theory (X_3) = 0.572, convergence truth theory (X_4) = 0.322 and role of contingency theory with contingency in IR implementation (Y_1) = 0.140. All of these variables were greater than 0.05. Therefore, these variables, such as X_1 , X_2 , X_3 , X_4 and Y_1 , have no significant influence on the implementation level of IR (Y_2). Meanwhile, the significance of semantic truth theory (X_5) = 0.004 is smaller than 0.05. Therefore, semantic truth theory (X_5) has a significant influence on the implementation level of IR (Y_2). Table 9 shows R square to be 0.125, which means the total effect of X_1 , X_2 , X_3 , X_4 , X_5 and Y_1 is 12.5%. The remaining 87.5% is attributed to other factors that influence Y_2 and have a value of ε_2 with $\sqrt{1 - 0.125} = 0.9354$. According to the results of the second structural equation assessment, only semantic truth theory has a significant effect on the implementation level of IR. Additionally, the specifications for the prediction model of the implementation level of IR within the equation $ILoIR (Y_2) = pY_2X_5 \text{ SemToT} + \varepsilon_2$ are shown.

4. DISCUSSION

The different test results of IR implementation level show evidence of the role of truth and contingency theory in differentiating IR implementation level based on knowledge and information. As the measurement results show that the role of each type of truth theory and the role of contingency theory in the IR implementation are achieved in various ways in predicting the implementation level of IR. Theoretically, it can be said that there is congruence between the research results and the acceptability of the role of truth theory and contingency theory in describing the truth and reality of IR implementation (Table 1; IIRC, 2011; IIRC, 2013). The results also show that there is harmony in IR implementation, which can be explained through the role of theory as an antecedent and the role of theory as an explanation of the consequences of implementation (Ara & Harani, 2020). Furthermore, the explanation for the existence of different levels of IR implementation is known through the relative roles of truth theory and contingency theory. The results of this study are in line with the information and knowledge from the role of each type of truth theory (Potter et al., 2013; Dragu & Tiron-Tudor, 2013; Roman et al., 2019; Tjahjadi et al., 2020). The role of contingency theory (Barth et al., 2017) has not in line within explaining for the discrepancies with previous research. The results showed that compliance was also aligned in changing user expectations with changing behavior in the context of the IIRC as a global norm provider of IRF, which states the normative role of each IIRC stakeholder (IIRC, 2018; IIRC, 2019). The role of the theory of truth of convergence in the context of fulfilling the convergence path is a need that must be fulfilled through the roles of each of the two parties

(providers and users). It refers to the IIRC's IRF (IIRC, 2013), which requires strengthening integrated reporting standards (IIRC, 2018; IIRC, 2019). Methodically, the need for convergence is approached based on reporting practices that have different characteristics (divergent paths) between the IR system and the sustainability reporting system (SR). Therefore, convergence becomes a way out for the implementation of reporting objectives (Potter et al., 2013). The existence of different pathways between sustainability reporting (financial reporting and environmental, social, CSR, ESG) requires a convergence path between SR and IRF. The important convergence path needs the role of regulators for standard making, in terms of agreements with lobbying between stakeholders to increase value creation.

Global coalitions with regulators, investors, companies, standard setters, the accounting profession and non-governmental organizations are needed in the context of the convergence of Global Reporting Initiative (GRI) and (IR). All of these roles are meaningful to IIRC stakeholder engagement to achieve the alternative or option from IR implementation contingently in organizations. This is empirically proven by the results highlighting that the theory of truth convergence has a significant effect on contingency predictions in the IR implementation, such as the role of IR as a reporting configuration, as a complementary role for reporting, as pressing the role of reporting complexity, as a creative design role for reporting and as diversity performance in reporting (Van de Ven et al., 2013). Moving towards IR as a new reporting system in an organization may be accomplished by aligning IR with existing reporting system practices in certain regions of a country, including the context in Indonesia (Tjahjadi et al., 2020). There is a need for convergence related to support or convenience for reporting entities in producing integrated annual reports, such as in Indonesia, where existing regulations do not specifically address IR reporting (Adhariani & De Villiers, 2019). A convergence path for integrated reporting is required through the fulfilment of a convergence process (Roco, 2016), with the aim of laying the foundation for contingencies in the IR implementation. Furthermore, this study is in line with previous empirical research, where IR is the creativity reporting for organizations, related to the reporting system that has been implemented (Barth et al., 2017).

The alignment of the theory of semantic truth in explaining the relationship between knowledge of semantic information and the IR implementation. Semantically, the IR implementation is most relevant and applicable through reporting entities that have complied with the financial reporting system and sustainability reporting system. It refers to the IR implementation functionality in the implementation success criteria (IIRC, 2018; IIRC, 2019). Information and knowledge exist about the sentence in the form of activities or reporting predicting of IR carried out by a subject or organization in related research. According to the explanations of the knowledge and information that were reviewed according to the article types and methods, as well as according to the subject and context of IR research (Pagin, 2016), the results show the role of the semantic theory of truth in relation to the description of the characteristics of IR implementation (Deloitte, 2015), as well as grouping IR research ideas from a global perspective, into five successive stages of the journey IR development.

At the meso level, the role of semantic truth can be found in the fact that the relationship between various aspects of policy implementation determinants (Payne, 2008) is related to a significant role with stakeholder engagement (Jeffery, 2009). Meaningful stakeholder engagement evolves from management attitudes in a crisis management context, such as reactive, vulnerable, episodic and even hostile to IR implementation. It is necessary to build stakeholder management relationships that are proactive, anticipatory, organized and defensive of the IR implementation. This is a fulfilment of the importance of presenting stakeholder behavior in interactive, encouraging and inclusive engagement with readiness to change (Jeffery, 2009). Although the IR implementation has not yet reached global adoption of IR, the discourse of IR implementation encourages IR to move from voluntary reporting to mandatory reporting, including in the regional context for the involvement of the IIRC's stakeholder roles in Indonesia. This also shows that IR has not yet reached theoretical implementation in practice, nor has it reached the stage of maintaining IR implementation (Nilsen, 2015; Dumay & Dai, 2017). Semantic truth through linguistic information shows the need for changing the behavior of IIRC stakeholders, as well as the IIRC, in encouraging performance and sharing perspectives for each region in the IR implementation. However, the IIRC teams need to fulfil IRF alignment with IRF user organization goals by making valuable contributions (IIRC, 2018; IIRC, 2019), as well as fulfilling access to practical development through reporting standards for IR that contribute to the clarity of the IRF reporting guidelines (IIRC, 2013).

Finally, the role of the theory of semantic truth in predicting the IR implementation is important for policy makers, including its relevance for the IIRC's Indonesian stakeholders. Meaningful IIRC stakeholder engagement in analytical focus are required with fulfilment of the role of individuals, teams, organizations and stakeholders of the IIRC. Semantically, there is a representation of roles at the macro level on the contextual phenomenon of the normative role of each IIRC stakeholder (IIRC, 2018; IIRC, 2019). The role of stakeholders is implied to reach IR implementation with reference to the role of the explanation of grand theory in the accounting field (Ara & Harani, 2020). Lastly, this is a representation of the linguistic aspect related to the meaning of grand theory, which has a perspective of explaining the meaning of system development. Therefore, the role of semantic truth theory would be a constructive discourse in the future at the macro level and to explain the relevant determinant factors in shaping policy implementation insights.

CONCLUSIONS

The findings identified three insights for the development perspective in achieving IR implementation. The findings provided information about the role of truth theory and contingency theory in explaining and predicting IR implementation. The role of information and knowledge in truth theory, which includes coherence, correspondence, pragmatic, convergence and semantics, and the role of contingency theory are important in describing the different levels of IR implementation. Information and knowledge of convergence truth theory play a role in predicting contingencies in the IR implementation. This highlighted that semantic truth theory plays a role in predicting IR implementation.

The findings also revealed different roles for each type of truth theory and contingency theory in explaining IR implementation. For the relatively dominant role to the least dominant role of the types of truth theory, and the contextual role of contingency theory in describing the different levels of IR implementation, the most meaningful role is that of semantic truth information, then, by the informational role of contingency theory, the role of pragmatic truth theory, the role of correspondence truth theory, the role of convergence theory and the role of coherence theory of truth. Furthermore, for the role of truth theories' information and knowledge about contingency in IR implementation, it was shown that a significant role was only played by convergence truth theory information and knowledge. For the role of knowledge of semantic information, pragmatics and coherence were not significant, and the role of information and knowledge of correspondence was least significant. For the role of truth theory and the role of contingency in the IR implementation, it was revealed that only knowledge of semantic truth theory information was significant. As for the role of contingency in IR implementation, convergence truth theory, pragmatic truth theory and coherence truth theory were not significant, with information from correspondence truth theory being the least significant.

This study has limitations on the implications of the role of information and knowledge (truth theory and contingency theory) in the ability to predict IR implementation. The coefficient values of the first structural equation and the second structural equation are less statistically significant. This requires further research to understand IR implementation. There is a need for IR research that strengthens various theoretical aspects and uses research variables more broadly.

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