



**The Role of Leadership-Member Exchange Relationships in
the Implementation of the International Public Sector
Accounting Standards by Greek Public Hospitals**

Journal:	<i>EuroMed Journal of Business</i>
Manuscript ID	EMJB-04-2021-0064.R3
Manuscript Type:	Empirical Research Paper
Keywords:	Public Hospitals, IPSAS, Leader-Member exchange, LMX, IPSAS implementation, IPSAS adoption

SCHOLARONE™
Manuscripts

The Role of Leadership-Member Exchange Relationships in the Implementation of the International Public Sector Accounting Standards by Greek Public Hospitals

Abstract

Purpose

This paper aims to examine the quality of relations within upper-level management in Greek public hospitals (GPHs), as well as to specify the extent to which these facilitate or hinder the forthcoming International Public Sector Accounting Standards (IPSAS) adoption and implementation.

Design/methodology/approach

A survey was conducted on a sample of 143 upper-management professionals drawn from across the 125 GPHs. A multivariate structural equation model is used to investigate the degree of interdependence of the level of convenience of implementation under the view of the leader-member exchange (*LMX*) scale.

Findings

The findings suggest that the established leader-member relations in the GPHs facilitate reforms. However, these relationships are of little benefit to IPSAS adoption and implementation, mainly due to the low degrees of competence and commitment to IPSAS. The passive adoption of IPSAS is the most likely outcome.

Originality/value

The study recontextualizes the LMX model to public sector research. The findings have value to hospital leadership and to policy makers, as well as to researchers studying the difficulties of IPSAS adoption and implementation.

Keywords: Public Hospitals, IPSAS, leader-member exchange, LMX, IPSAS implementation, IPSAS adoption

Paper type: Research paper

Introduction

The contemporary public sector is in need of reform worldwide, as it is expected to implement managerial and commercial characteristics (Jacobs, 2016). This cultural shift focuses on accounting and financial management means (Steccolini et al., 2020), which, in turn, has an effect on asset management, decision-making processes, and the activity of public organizations (Kaganova, 2012; Chan and Zhang, 2012). The International Public Sector Accounting Standards (IPSAS) subserve transparency, accountability, and efficiency in public finances (IPSASB, 2015), promote competitiveness and effectiveness (Heiling, 2016), enhance auditing (Sfakianakis *et al.*, 2020), and support the work of management and accountants (Kober *et al.*, 2013).

1
2
3 Internationally, the implementation of IPSAS reflects a field of diversity (Bruns *et al.*,
4 2020; Brusca *et al.*, 2018; Bellanca and Vandernoot, 2014; Heiling, 2016; IFAC, 2020), with
5 many countries still being in an IPSAS-implementation phase (ACCA, 2017). Although, to
6 support optimal management of fiscal issues, in the EU the IPSAS are being implemented at
7 the national, regional, and public sectoral levels (Mnif and Gafsi, 2020), many member-
8 states do not embrace IPSAS (Brusca *et al.*, 2018; Muller-Marques Berger and Heiling, 2015;
9 PwC, 2014; Burth and Hilgers, 2017; Rossi *et al.*, 2016).

10
11 The effort to embrace new public financial management logics in Greek public
12 hospitals (GPHs) essentially started in 2009 with the adoption of accrual-based accounting.
13 During the 2010s, supply and service cost control became strictly regulated (Polyzos *et al.*,
14 2013). IPSAS are to be adopted in full by GPHs on 1/1/2023. This is a large-scale reform that
15 requires the diffusion of knowledge on practical application to be supported by thorough
16 research and study. The Greek public sector is characterized as complex and inefficient
17 (Kounetas and Papathanassopoulos, 2012). There are still difficulties in the full
18 implementation of accrual-based accounting (Christiaens *et al.*, 2015; Eriotis *et al.*, 2011),
19 which often results in inaccurate costing of services and management control deficiency
20 (Tsitsakis *et al.*, 2014). The GPHs are funded, staffed, regulated, and controlled by the Greek
21 state. However, differences in the orientation of managers on accounting information
22 influence the use and effectiveness of accounting systems in GPHs (Tsitsakis, 2009; 2012).

23
24 Local factors hinder IPSAS adoption. In public organizations this may lead to poor
25 implementation (Steccolini *et al.*, 2020), or to passive compliance that does not meet the aims
26 of reform (Mickeli and Pavlov, 2020), but merely delivers a ceremonial implementation
27 (Burns and Scapens, 2000) of change to conform to institutional demands. Such an outcome
28 would simply enhance bureaucracy without having any significant impact on management
29 logics and organizational efficiency. Many of the deterrent factors (ACCA, 2017) refer to the
30 intellectual capital of hospitals to implement IPSAS: compliance, competence, and
31 commitment (Bellucci *et al.*, 2020; Clearly and Quinn, 2016; Martin-de Castro *et al.*, 2019;
32 Murray *et al.*, 2016). Although IPSAS may reduce bureaucracy and promote effective
33 management in GPHs (Cohen and Karatzimas, 2016) if properly embraced, it is uncertain
34 whether sufficient competence and commitment exists to achieve this.

35
36 This paper utilizes the leader-member exchange (LMX) model (Audenaert *et al.*,
37 2016; Martin *et al.*, 2010) to explore the quality of relationships between staff and leaders
38 within upper-level management in the GPHs, where such management has the authoritative
39 power to support the IPSAS implementation. However, the normative and the actual relations
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 may differ (Makrygiannakis and Jack, 2016). The quality of their actual relations influences
4 the utilization of competencies, enhances commitment, and supports change (Han *et al.*,
5 2020; Jensen *et al.*, 2019; Peng *et al.*, 2020), elements that are expected to benefit IPSAS
6 implementation in GPHs.
7
8
9

10 Consequently, the following research questions are examined:

11
12 a) To what extent will the levels of competence and commitment to IPSAS in
13 GPHs facilitate or hinder the reform?
14

15
16 b) To what extent will the quality of upper-management relationships in GPHs
17 facilitate or hinder the implementation of IPSAS?
18
19
20
21

22 **Background**

23 **Deterrents of IPSAS implementation**

24
25
26 Attempted accounting reforms lead to poor IPSAS implementation (Steccolini *et al.*,
27 2020), as there are deterrent factors and local contingencies that hamper this effort. An
28 Association of Chartered Certified Accountants report (ACCA, 2017) expounds these factors:
29 insufficient IT support, deficient training of staff, limited awareness of IPSAS—especially on
30 the accrual basis—and the limited involvement of upper-level management in the IPSAS
31 implementation (see also PwC, 2015; Polzer *et al.*, 2019). In GPHs' context, the limited
32 evidence supports these findings (Christiaens *et al.*, 2015; Eriotis *et al.*, 2011).
33
34
35
36
37
38

39 Many of these deterrents refer to the intellectual capital of hospitals, and specifically
40 to the compliance, competence, and commitment of leadership and staff to implement IPSAS
41 (Clearly and Quinn, 2016; Martin-de Castro *et al.*, 2019; Murray *et al.*, 2016). Investing in
42 staff-member learning and training creates “competence” and specialization, while
43 “commitment” is related to motivation for work, creation, vision, and recognition of the staff
44 member's performance (Bellucci *et al.*, 2020). Regarding compliance, it is the staff member's
45 emotional and behavioral change caused by either a request or an order of their leader (APA,
46 2007). However, passive adoption for the sake of compliance has been noticed in accounting
47 reforms (Mickeli and Pavlov, 2020), which does not align with the aims of IPSAS; namely,
48 the infusion of managerial and commercial characteristics to GPHs and the efficient
49 management of their resources and services. The forthcoming IPSAS adoption by GPHs
50 raises issues of competence and commitment to the reform, as these elements will influence
51 implementation and compliance and, in turn, the success of the reform.
52
53
54
55
56
57
58
59
60

Relationships with upper management as reform mediators

The quality of relationships between leaders and staff members influences teamwork, group accountability, and role interchangeability (Carstens and Barnes, 2006), which are all traits that empirical research interrelates with business performance (Carson *et al.*, 2007). Effective leadership requires interacting with dedicated staff to provide support for the successful implementation of changes. The quality of this interaction affects motivation and commitment, which are necessary attributes for the introduction of complex projects (Han *et al.*, 2020; Jensen *et al.*, 2019; Peng *et al.*, 2020), such as IPSAS implementation.

The LMX theory (Audenaert *et al.*, 2016) allows the different kind of relationship between the leader and any staff member to be indicated through a series of dyadic labor transactions (Martin *et al.*, 2010; Graen and Uhl-Bien, 1995). Each relationship consists of three main dimensions: mutual respect for competence, trust in character, and benevolence toward each other (Graen and Schiemann, 2013).

The quality of the dyadic relationship depends on how the two parts enact the types of the relationship, defined as “stranger,” “familiar,” and “partner,” (Graen and Uhl-Bien, 1995). In the “stranger” type, the two parts behave close to their roles, experiencing one-way influences and low-quality interactions. The “familiar” type describes medium-quality relationships. “Partner” is the optimal type, experiencing a high-degree of mutual trust, respect, and commitment, and their interactions expand beyond a work relationship by engaging in extra-role support (Omilion-Hodges and Baker, 2017; Omilion-Hodges *et al.*, 2015). Staff members in high-quality dyadic relations receive support, information, guidance, and opportunities for improvement and advancement, as well as enjoying greater degrees of power and decision-making authorization (Northouse, 2013; Scandura and Pellegrini, 2008). These relations enhance the utilization of competencies. They facilitate the distribution of responsibilities and the undertaking of new work-roles and tasks, which are elements that, in turn, are essential for the implementation of reforms and new projects. IPSAS adoption is a collective innovative effort, and its outcome will be partly dependent on the quality of LMX relations.

Empirical findings show that organizations with good working relationships and high LMX scores secure staff member motivation and commitment, which leads to more efficient performances and positive organizational results (e.g., Anand *et al.*, 2016; Hanasono, 2017).

1
2
3 Research that applies LMX either on the public sector (Audenaert et al., 2016; Han et al.,
4 2020; Tummers and Knies, 2013) or on accounting (Gupta and Chadha, 2017; Leow and
5 Khong, 2009) is scarce; however, the findings of these studies also suggest that high LMX
6 scores enhance performance and organizational outcomes.
7
8
9

10 This study applies the LMX framework to evaluate relations established between
11 leadership and managers at the three top administrative positions in GPHs. Their relationship
12 quality, which is connected to degrees of commitment and motivation, will influence the
13 IPSAS implementation. Innovations, even if institutionally imposed, encounter resistance due
14 to change in routines or threatening the existing power balance (Broadbent *et al.*, 2001). The
15 upper administrative levels of hospitals have the authoritative power to implement IPSAS,
16 yet it is the quality of leadership-management relations that will either facilitate or hinder
17 effective implementation.
18
19
20
21
22
23
24
25

26 **Research methods**

27
28
29 The questionnaire used in this study includes the seven LMX-items (LMX-7) on a
30 five-point Likert scale and four questions related to IPSAS implementation. It should be
31 noted that question numbers do not follow a sequence, because they were part of a
32 questionnaire including additional factors that are beyond the scope of this paper.
33
34
35

36 The LMX instrument, designed by Graen and Uhl-Bien (1995), is a seven-item
37 questionnaire, accompanied with the respective scoring key for the result interpretation that
38 evaluates the leadership-staff relationships through the subordinates' perspective.
39
40

41 The questionnaire's four questions are based on the ACCA's (2017) report.

42 Non-probability at convenience sampling was used to select the survey population,
43 from which these three positions of upper-level management in GPHs were chosen:
44
45
46

- 47 1) The General Director/Commander
 - 48 2) The Administrative Director
 - 49 3) The Head of the Financial Department.
- 50
51
52

53 Therefore, the population is calculated by multiplying the number of executives by
54 the number of GPHs, which returns 375 research subjects in total. The optimal sample should
55 consist of 196 subjects/participants for a statistical error rate of 5% (Sandwell Research,
56 2009). However, 143 finally responded (response rate 73%: 39 General Directors, 53
57 Administrative Directors, 51 Finance Directors). The number of the responders was
58
59
60

1
2
3 considered as satisfactory, given that the Covid pandemic considerably added to the workload
4 in hospitals.
5

6
7 The participants were informed in advance on the study's nature, objectives, and the
8 type of questions, and assured about anonymity and confidentiality. Consent was obtained in
9 three separate stages: The Ministry of Health (approval granted in October 2019), the seven
10 Health Regions of Greece (approvals granted by March 2020), and from each GPH
11 separately. The data collection period was completed by August 2020.
12
13

14
15 The next section presents the findings on a) the type of LMX relationships, b) the
16 convenience of IPSAS implementation, and c) the (positive or negative) relationship between
17 factors (a) and (b). Descriptive Statistical indicators per variable are used for (a) and (b),
18 while the multivariate analysis (c) is evaluated through a structural equation model.
19
20
21
22
23
24

25 Findings

26 LMX factor

27
28 The LMX instrument has been validated in many studies. However, due to its
29 translation into Greek it was tested for consistency. Cronbach's alpha consistency index of
30 the scale was found to be 0.881, which is considered to be good.
31
32

33
34 Of the 143 participants, 11 (7.7%) did not answer at least one of the LMX-7 questions
35 and were excluded from further analysis. The findings show that:
36
37

38
39 1. (Q-D1) The frequency of satisfaction of managers with the projects implemented is
40 of the order of 72.6% (48.9%+23.7%).
41

42
43 2. (Q-D2) The predominant percentage in the understanding of work problems and
44 needs was observed in the category "Moderately" (41.0%).
45

46
47 3. (Q-D3) Recognition of their potential by superiors (Fully + Considerably) amounts
48 to 67.6%.
49

50
51 4. (Q-D4) The belief that the leader would use authority and status to help solve work
52 problems amounts to 64.0%.
53

54
55 5. (Q-D5) The probability of the leader intervening to deflect criticism and protect
56 staff from difficult situations is statistically divided between low, medium, and high (80.6%).
57
58
59
60

1
2
3 6. (QD-6) The number of subordinates with sufficient confidence in the leader's
4 abilities that they would defend and justify the leader's decisions, even in his/her absence, is
5 relatively high and amounts to 60.2%.
6
7

8 7. (QD-7) The characterization of the employment relationship with the boss, from
9 above average and very effective, is reflected by 72.7%.
10
11

12 The findings for each question-parameter of the statistical indicators (Table 1, sorted
13 in descending order of average value) show an average value above about 3.5, except for the
14 fifth question, which is in the middle of the five-point Likert scale (score from one to five)
15 and ranked as moderate.
16
17
18

19 The most positive attitude is shown by the first question (satisfaction with
20 performance), with an average value of 3.88 ± 0.89 , followed by the seventh question
21 (efficiency of working relationship), with an average value of 3.84 ± 0.89 .
22
23
24
25
26

27 **Table 1:** Statistical Indicators per Question

28 Source: Authors' Survey
29

30 The overall evaluation of the participants' attitudes on the leader-subordinate
31 relationship was calculated by summing all the answers in the five-point Likert scale of the
32 questions. Therefore, a sum ranging from 7 (coding 1 for negative view) to 35 (coding 5 for
33 very positive view) is expected with an average value of 21 $[(7+35)/2]$. Central tendency and
34 dispersion indicators are displayed, in the above table, per question. The analysis shows that
35 both the overall mean (25.2 ± 4.9) and median (26) are greater than the average value of the
36 cumulative scale (21). This is an indication that, on average, a positive attitude has been
37 observed.
38
39
40
41
42
43
44

45 The findings show that for more than half of the participants (59.1%) the leader-
46 subordinate relationship is at a high (40.9%) or very high (18.2%) level, and consequently in
47 the "partner" phase. In the "familiar" phase the respective percentage is 27.3% (one in about
48 four answers), while in the "stranger" phase it is 13.7% (2.3% Very Low+11.4% Low).
49
50
51
52
53

54 **Factor of convenience of IPSAS implementation**

55 The factor of convenience of IPSAS implementation was measured through a short
56 questionnaire comprising four questions using a five-point Likert scale. The coding of the
57 answers to all the questions was hierarchical, where 1 means a very positive attitude
58
59
60

concerning the issue involved in the question, while 5 means a negative attitude respectively. Cronbach's alpha consistency index of questions (measured from 133 full answers) for this factor was 0.744, which is considered to be acceptable.

Table 2: Statistical Indicators of the Implementation per Question
Source: Authors' Survey

All scores on the degree of convenience of IPSAS implementation range from "Medium" and below with a percentage of over 50%, indicating the emerging difficulties of their implementation in the public sector (Table 2).

The total mean value of the IPSAS application factor amounts to 3.56, which signifies that, based on the current situation, application in the health units is toward the negative attitude. The worst score is attributed to the inappropriate training of staff and the smallest standard deviation indicates that most respondents agree with this.

Relationship Between Implementation Phase and LMX

Multivariate analysis has been implemented to identify any underlying relations between latent-construct variables of implementation and LMX and the questions measured by them. The model applied was the structural equation model (SEM), which investigates the degree of interdependence of the two latent variables, that is, the degree of convenience of implementation under the view of the leadership's existing LMX scale. The analysis included sampling units that answered all questions (N=122). A 5% significance level is considered acceptable. An indication of the relationship strength (standardized b-values) among questions measuring a latent variable is presented nearby the relation arrows. The strength of the value corresponds to the strength of the relation of the question with the last variable. For example, training (Q-A10) is strongly associated (0.83) with the implementation. The results are presented diagrammatically in Figure 1.

Figure 1: Results of the Application of the Structural Equation Model

The relationship between the two latent variables (convenience of implementation and the view of the leadership-member relationship) shows a statistically positive significant relationship ($b=0.22$, 95% Confidence Interval= $0.02-0.42$, $z=2.12$, $p=0.034<0.05$), although

1
2
3 not very strong, but indicative that the positivity of existing leadership-staff relationships
4 correlates with the ease of implementing IPSAS in GPHs.
5

6
7 The findings also highlight the need for a regular “measurement” of the internal
8 environment of each organization concerning the existing LMX relationships for the
9 assessment of implementation problems, and the design of intervention strategies and tactical
10 methods for successful implementation.
11
12
13
14

15 16 **Implications and Conclusions** 17

18 The LMX model is used to identify the quality of leadership-staff relationships in the
19 GPHs, to evaluate the influence of their extant relationships on the effective IPSAS
20 implementation. In addition, elements of competence and commitment to the implementation
21 project are explored, and along with those relationships are discussed in relation to one
22 another.
23
24
25

26 In this study, almost 60% of the participants state that they have developed partner
27 relationships of mutual trust, support, and respect with their leader. However, a considerable
28 27.3% are merely acquaintances, and 13.7% claim that their relationship with their leader is
29 at the stage of “strangers,” in that they have not established any sound ground to identify a
30 common spirit of cooperation and support.
31
32
33

34 This is partly justified by the recent appointment of the new Greek government,
35 followed by new appointments of governors and deputy governors at the Health Regions of
36 Greece and the GPHs. The latter took place between December 2019 and February 2020. The
37 data of this study were collected during the summer of 2020, thus, in many instances, there
38 was probably insufficient time to develop high-quality relationships. Therefore, the quality of
39 the relationships is expected to improve.
40
41
42
43
44
45

46 Regarding the degree of convenience of IPSAS implementation, the results reveal a
47 rather unfavorable situation for the GPHs as the overall level was low. Specifically, the
48 degree of appropriate training provided to staff to complete IPSAS implementation has been
49 rated by most of the participants (69.5%) as either low or very low. Moreover, the degree of
50 knowledge on the standards and requirements of the staff involved in IPSAS implementation
51 has also been rated by most of the respondents (67.2%) either as low or very low. Finally, the
52 answers on the involvement of the GPHs management in IPSAS implementation (51.5% low
53 and very low) raise some skepticism concerning the obstacles that must be overcome.
54
55
56
57
58
59
60

1
2
3 Moreover, almost half of the respondents (48.5%) believe that IPSAS will not lead to
4 the identification of unexploited resources (29.1% and 19.4% rate their expectations as low to
5 very low respectively), while more than a third of them (38.8%) have medium expectations.
6 This point deserves attention, for it implies that at least some of the normative projections of
7 accounting academics and professional bodies are not shared by the upper-level management
8 of hospitals. This suggests, at least, that the local managers, contrary to the dominant
9 dispositions in private sectors on IFRS (Mantzari and Georgiou, 2019), are not convinced on
10 the superiority of IPSAS compared to the current standards. Training (Lois *et al.*, 2016) and
11 communication could change the dispositions of managers toward IPSAS, but this requires
12 central planning and preparation of human resources before, or at the early stages of, IPSAS
13 implementation.
14
15
16
17
18
19
20
21
22

23 However, the significant positive association between the LMX level and the IPSAS
24 implementation indicates that high LMX rates can compensate for unfavorable conditions
25 underlining IPSAS implementation, as leadership and staff are confident enough for
26 undertaking extra-role assignments and managing change.
27
28
29

30 The conclusions concern the 125 GPHs. The IPSAS implementation will probably
31 proceed in differently paced phases, with the ensuing diversity in the quality of accounting
32 information creating management difficulties for public economics.
33
34

35 Considering the intellectual capital as a reflection of the competence-commitment
36 multiplication, we are leading on to a null formula result, if one of the factors is zero (Murray
37 *et al.*, 2016; Clearly and Quinn, 2016). The findings show low-degree IPSAS awareness even
38 in those who are responsible for the implementation, which suggests low-degree competence,
39 and reveal a rather unfavorable ‘environment’ for IPSAS implementation in the GPHs.
40 Moreover, upper-level managers rate their expectations for effective identification of unused
41 resources through IPSAS as medium or low, which suggests low-degree commitment on their
42 behalf. Transformational leadership requires leaders to work closely with their staff for
43 effective change implementation (Han *et al.*, 2020; Jensen *et al.*, 2019; Peng *et al.*, 2020);
44 however, this is unlikely to occur in the case of IPSAS adoption in GPHs. Therefore, the
45 most probable outcome is their passive adoption (Mickeli and Pavlov, 2020), without cultural
46 shift (Jacobs, 2016; Steccolini *et al.*, 2020) or improvement on the efficiency of operations.
47
48
49
50
51
52
53
54
55

56 Using the LMX model re-contextualization (Petre and Rugg, 2010), which is usually
57 applied in private sectors, for GPHs, confirms its applicability and potential in public sector
58 research. In this study it was realized that high-quality relationships lead managers to be more
59
60

1
2
3 optimistic for, and more receptive to, the implementation of new projects and the
4 forthcoming IPSAS implementation. However, low-level competence and commitment
5 suggest that IPSAS implementation in GPHs has little support.
6
7

8
9 Policy makers should consider that future-oriented and centrally planned training for
10 accounting information users, and communication strategies to secure higher-level
11 commitment, should precede any adoption efforts. Upper-level leadership in public hospitals
12 cannot reject the implementation of government-planned reforms. However, their lack of
13 commitment to changes can lead to passive compliance. This point also suggests a theoretical
14 question on whether IPSAS can sufficiently lead toward the cultural shift of new public
15 management, or whether the cultural shift should predate any technical accounting reforms to
16 secure active engagement. Although generalizations require cautious treatment, there could
17 be prospective conclusions regarding other cases of IPSAS adoption in public organizations,
18 and research in other sectors would be useful. Future research in lower ranks of hierarchy and
19 a post-implementation evaluation will supplement the findings of this study.
20
21
22
23
24
25
26
27
28
29
30
31

32 References

- 33
34 ACCA (2017), "IPSAS implementation: current status & challenges. Professional insight
35 report", available at: [https://www.accaglobal.com/pk/en/professional-insights/global-](https://www.accaglobal.com/pk/en/professional-insights/global-profession/ipsas-implementation-current-status-and-challenges.html)
36 [profession/ipsas-implementation-current-status-and-challenges.html](https://www.accaglobal.com/pk/en/professional-insights/global-profession/ipsas-implementation-current-status-and-challenges.html)
37
38 Anand, S., Vidyarthi, P.R. and Park, H.S. (2016), "LMX differentiation: Understanding
39 relational leadership at individual and group levels", Bauer, T.N. and Erdogan, B.
40 (Ed.s), *The Oxford handbook of leader-member exchange*, Oxford University Press,
41 New York, NY, pp. 263-291.
42
43 APA (2007). "Compliance", *APA Dictionary of Psychology*, American Psychological
44 Association, Washington, D.C.
45
46 Audenaert, M., Decramer, A., George, B., Verschuere, B. and Van Waeyenberg, T.
47 (2016), "When employee performance management affects individual innovation in
48 public organizations: the role of consistency and LMX", *The International Journal of*
49 *Human Resource Management*, pp. 1-20.
50
51 Bellanca, S. and Vandernoot, J. (2014), "International Public Sector Accounting Standards
52 (IPSAS) Implementation in the European Union (EU) Member States", *Journal of*
53 *Modern Accounting and Auditing*, Vol. 10 No. 3, pp. 257-269.
54
55 Bellucci, M., Marzi, G., Orlando, B. and Ciampi, F. (2020), "Journal of Intellectual Capital: a
56 review of emerging themes and future trends", *Journal of Intellectual Capital*, Vol.
57 ahead-of-print No. ahead-of-print.
58
59 Broadbent, J., Jacobs, K. and Laughlin, R. (2001), "Organisational resistance strategies to
60 unwanted accounting and finance changes: The case of general medical practice in the
UK", *Accounting, Auditing & Accountability Journal*, Vol. 14 No. 5, pp. 565-586.

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Bruns, H.-J., Christensen, M. and Pilkington, A. (2020), "Intellectual heritages of post-1990 public sector accounting research: an exploration", *Accounting, Auditing & Accountability Journal*, Vol. 33 No. 8, pp. 2077-2110.
- Brusca, I., Caperchione, E., Cohen, S. and Manes-Rossi, F. (2018), "IPSAS, EPSAS and Other Challenges in European Public Sector Accounting and Auditing" Ongaro E. and Van Thiel S. (Ed.s), *The Palgrave Handbook of Public Administration and Management in Europe*, Palgrave Macmillan, London.
- Burns, J. and Scapens, R. (2000), "Conceptualizing management accounting change: an institutional framework", *Management Accounting Research*, Vol. 11 No. 1, pp. 3-25.
- Burth, A. and Hilgers, D. (2017), "Why do we need EPSAS?", available at: <http://www.epsas.eu/en/why-do-we-need-epsas.html>
- Carson, J.B., Tesluk, P.E. and Marrone, J.A. (2007), "Shared Leadership in Teams: An Investigation of Antecedent Conditions and Performance", *Academy of Management Journal*, Vol. 50 No. 5, pp. 1217-1234.
- Carstens, F. and Barnes, N. (2006), "The Quality of Leader/employee Relationship in Business Performance", *Journal of Human Resource Management*, Vol. 4 No. 2, pp. 10-19.
- Chan J.L. and Zhang Q. (2012), "Government Accounting Standards and Policies" Allen R., Hemming R. and Potter B.H. (Ed.s), *The International Handbook of Public Financial Management*, Palgrave Macmillan, London, pp. 34-72.
- Christiaens, J., Vanhee, C. and Manes-Rossi, F. (2015), "The effect of IPSAS on reforming governmental financial reporting: an international comparison", *International Review of Administrative Sciences*, Vol. 81 No. 1, pp. 158-177.
- Clearly, P. and Quinn, M. (2016), "Intellectual capital and business performance: an exploratory study of the impact of cloud-based accounting and finance infrastructure", *Journal of Intellectual Capital*, Vol. 17 No. 2, pp. 255-278.
- Cohen, S. and Karatzimas, S. (2016), "Modernizing government accounting standards in Greece: a case of "garbage can" decision making", *Public Money & Management*, Vol. 36 No. 3, pp. 173-180.
- Eriotis, N., Stamatiadis, F. and Vasiliou, D. (2011), "Assessing Accrual Accounting Reform in Greek Public Hospitals: An Empirical Investigation", *International Journal of Economic Sciences and Applied Research*, Vol. 4 No. 1, pp. 153-184.
- Graen, G.B. and Schiemann, W. (2013), "Leadership-motivated excellence theory: An extension of LMX", *Journal of Managerial Psychology*, Vol. 28 No. 5, pp. 452-469.
- Graen, G.B. and Uhl-Bien, M. (1995), "Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective", *The Leadership Quarterly*, Vol. 6 No.2, pp. 219-247.
- Gupta, N. and Chadha, N.K. (2017), "Study of Proactive Personality, LMX Quality and Employee Creativity in Delhi and NCR Organisations", *Global Journal of Enterprise Information System*, Vol. 9 No. 2.
- Han, S., Oh, G. and Kang, S. (2020), "The link between transformational leadership and work-related performance: moderated-mediating roles of meaningfulness and job characteristics", *Leadership & Organization Development Journal*, Vol. 41 No. 4, pp. 519-533.
- Hanasono, L.K. (2017) "Leader-Member Exchange 7 Questionnaire (LMX-7)" Worthington, D.L. and Bodie, G.D. (Ed.s), *The Sourcebook of Listening Research: Methodology and Measures*, John Wiley & Sons, Hoboken, NJ, pp. 354-360.

- 1
2
3 Heiling, J. (2016), “Basics of IPSAS and IPSASB’s Conceptual Framework”, available at:
4 [https://www.coursehero.com/file/64068273/62-Basics-of-IPSAS-and-IPSASBs-](https://www.coursehero.com/file/64068273/62-Basics-of-IPSAS-and-IPSASBs-Conceptual-Frameworkpdf/)
5 [Conceptual-Frameworkpdf/](https://www.coursehero.com/file/64068273/62-Basics-of-IPSAS-and-IPSASBs-Conceptual-Frameworkpdf/)
6
7 IFAC (2020), “International Public Sector Accounting Standards -IPSAS 30- Financial
8 Instruments: Disclosures”, available at:
9 https://www.ifac.org/system/files/publications/files/B3-IPSAS_30.pdf
10
11 IPSASB (2015), *The IPSASB Strategy for 2015 forward: Leading through change*, The
12 International Federation of Accountants IFAC.
13
14 Jacobs, K. (2016), “Theorising Interdisciplinary Public Sector Accounting Research”,
15 *Financial Accountability & Management*, Vol. 32 No. 4, pp. 469-488.
16
17 Jensen, U.T., Andersen, L.B., Bro, L.L., Bøllingtoft, A., Eriksen, T.L.M., Holten, A.-L. and
18 Würtz, A. (2019), “Conceptualizing and Measuring Transformational and Transactional
19 Leadership”, *Administration & Society*, Vol. 51 No.1, pp. 3-33.
20
21 Kaganova, O. (2012), “Valuation and Pricing of Government Land and Property: A Tip of a
22 Growing Iceberg”, *Real Estate Issues*, Vol. 37 No.1, pp. 9-16.
23
24 Kounetas, K. and Papanthanasopoulos, F. (2012), “How efficient are Greek hospitals? A case
25 study using a double bootstrap DEA approach”, *The European Journal of Health*
26 *Economics*, Vol. 14 No.6, pp. 979-994.
27
28 Leow, K.L. and Khong, K.W. (2009), “Organizational Commitment: The Study of
29 Organizational Justice and Leader Member Exchange (LMX) Among Auditors in
30 Malaysia”, *International Journal of Business and Information*, Vol. 4 No. 2, pp. 161-
31 198.
32
33 Lois, P., Tabouratzi, E. and Makrygiannakis, G. (2016), “Accounting Information Systems
34 course: perceptions of accounting and non-accounting students”, *EuroMed Journal of*
35 *Business*, Vol. 12 No. 3, pp. 258-268.
36
37 Makrygiannakis, G. and Jack, L. (2016), “Understanding management accounting change
38 using strong structuration frameworks”, *Accounting, Auditing & Accountability*
39 *Journal*, Vol. 29 No.7, pp. 1234-1258.
40
41 Mantzari, E., and Georgiou, O. (2019), “Ideological hegemony and consent to IFRS: Insights
42 from practitioners in Greece”, *Critical Perspectives on Accounting*, Vol. 59, pp.70-93.
43
44 Martín-de Castro, G., Díez-Vial, I. and Delgado-Verde, M. (2019), “Intellectual capital and
45 the firm: evolution and research trends”, *Journal of Intellectual Capital*, Vol. 20 No. 4,
46 pp. 555-580.
47
48 Martin, R., Epitropaki, O., Geoff, T. and Topakas, A. (2010), “A review of Leader-Member
49 Exchange (LMX) research: Future prospects and directions”, Hodgkinson, G.P. and
50 Ford, J.K. (Ed.s), *International Review of Industrial and Organizational Psychology*,
51 Wiley, Chichester, UK, pp. 35-88.
52
53 Micheli, P. and Pavlov, A. (2020), “What is performance measurement for? Multiple uses of
54 performance information within organizations”, *Public Administration*, Vol. 98 No. 1,
55 pp. 29-45.
56
57 Mnif, Y. and Gafsi, Y. (2020) A contingency theory perspective on the analysis of central
58 government accounting disclosure under International Public Sector Accounting
59 Standards (IPSAS). *Meditari Accountancy Research*, Vol.28 No. 6, pp.1089-1117.
60
61 Müller-Marqués Berger, T. and Heiling, J. (2015), “Harmonisierung des öffentlichen,
62 Rechnungswesens – Ein Überblick über das neue IPSAS – Rahmenkonzept”, *Die*
63 *Wirtschaftsprüfung*, Vol. 4 No.1, pp. 171-180.
64
65 Murray, A., Papa, A., Cuozzo, B. and Russo, G. (2016), “Evaluating the innovation of the
66 internet of things: empirical evidence from the intellectual capital assessment”,
67 *Business Process Management Journal*, Vol. 22 No. 2, pp. 341-356.

- 1
2
3 Northouse, P.G. (2013), *Leadership: Theory and Practice*, SAGE Publications, Thousand
4 Oaks, CA.
- 5 Omilion-Hodges, L.M. and Baker, C.R. (2017), “Communicating leader-member relationship
6 quality: The development of leader communication exchange scales to measure
7 relationship building and maintenance through the exchange of communication-based
8 goods”, *International Journal of Business Communication*, Vol. 54 No. 2, pp. 115-145.
- 9 Omilion-Hodges, L.M., Ptacek, J.K. and Zerilli, D.H. (2015), “A comprehensive review and
10 communication research agenda of the contextualized workgroup: The evolution and
11 future of leader–member exchange, coworker exchange, and team- member exchange”,
12 Cohen, E.L. (Ed.), *Communication yearbook*, Routledge, New York, NY, pp. 343-377.
- 13 Peng, S., Liao, Y. and Sun, R. (2020), “The Influence of Transformational Leadership on
14 Employees’ Affective Organizational Commitment in Public and Nonprofit
15 Organizations: A Moderated Mediation Model”, *Public Personnel Management*, Vol.
16 49 No. 1, pp. 29-56.
- 17 Petre, M. and Rugg, G. (2010), *The unwritten rules of PhD research*, Open University Press,
18 London.
- 19 Polyzos, N., Karanikas, H., Thireos, E., Kastanioti, C., and Kontodimopoulos, N. (2013).
20 “Reforming reimbursement of public hospitals in Greece during the economic crisis:
21 implementation of a DRG system”, *Health policy*, Vol. 109 No. 1, pp. 14-22.
- 22 Polzer, T., Gårseth-Nesbakk, L. and Adhikari, P. (2019), “Does your walk match your talk?
23 Analyzing IPSASs diffusion in developing and developed countries”, *International
24 Journal of Public Sector Management*, Vol. 33 No. 2/3, pp. 117-139.
- 25 PwC (2014), “Collection of information related to the potential impact, including costs, of
26 implementing accrual accounting in the public sector and technical analysis of the
27 suitability of individual IPSAS standards. Study to inform the impact assessment of
28 EPSAS implementation, 2013/S 107-182395”, available at:
29 [http://ec.europa.eu/eurostat/documents/1015035/4261806/EPSAS-study-final-PwC-
30 report.pdf](http://ec.europa.eu/eurostat/documents/1015035/4261806/EPSAS-study-final-PwC-report.pdf)
- 31 PwC (2015), “PwC Global survey on accounting and reporting by central governments 2nd
32 edition. Towards a new era in government accounting and reporting”, available at:
33 [https://www.pwc.com/my/en/assets/publications/towards-new-era-in-govt-accounting-
34 reporting.pdf](https://www.pwc.com/my/en/assets/publications/towards-new-era-in-govt-accounting-reporting.pdf)
- 35 Rossi, F.M., Cohen S., Caperchione, E. and Brusca, I. (2016), “Harmonizing public sector
36 accounting in Europe: thinking out of the box”, *Public Money & Management*, Vol. 36
37 No. 3, pp. 189-196.
- 38 Sandwell Research (2009), “Research methodology: A guide to sampling & statistical
39 reliability”, available at:
40 [http://www.sandwelltrends.info/lisv2/briefingnotes/Technical_Note_5
41 A_guide_to_sampling_and_statistical_reliability.pdf](http://www.sandwelltrends.info/lisv2/briefingnotes/Technical_Note_5)
- 42 Scandura, T. and Pellegrini, E. (2008), “Trust and leader-member exchange: A closer look at
43 relational vulnerability”, *Journal of Leadership and Organizational Studies*, Vol. 15
44 No.2, pp. 101-110.
- 45 Sfakianakis, G., Grigorakis, N., Galyfianakis, G. and Katharaki, M. (2020), “The impact of
46 macro-fiscal factors and private health insurance financing on public health
47 expenditure: evidence from the OECD countries for the period 2000–2017”, *EuroMed
48 Journal of Business*, Vol.16 No. 1, pp.1-24.
- 49 Steccolini, I., Saliterer, I. and Guthrie, J. (2020) The role(s) of accounting and performance
50 measurement systems in contemporary public administration, *Public Administration*,
51 Vol. 98 No. 1, pp.3-13.
- 52
53
54
55
56
57
58
59
60

- 1
2
3 Tsitsakis, C. (2009), "Motivation of accountants as a critical factor for the implementation of
4 modern costing systems. The case of Greek Healthcare Organizations" *Southeuropean*
5 *Review of Business Finance and Accounting*, Vol. 7, pp. 101-108.
6
7 Tsitsakis, C. (2012), "The adoption of costing systems by Greek healthcare organizations. In
8 C. Zopounidis (Ed.), *Computational Optimization in Economics and Finance Research*
9 *Compendium*. Nova Science Publishers Inc: New York, NY, pp.181-196
10
11 Tsitsakis, C.A., Karasavoglou, A. and Eleftheriadou, G. (2014), "The Cure of a big Patient –
12 An Accountant's Perspective", *Procedia Economics and Finance*, Vol. 9 No. 1, pp.
13 200-207.
14
15 Tummers, L.G. and Knies, E. (2013), "Leadership and Meaningful Work in the Public
16 Sector", *Public Administration Review*, Vol. 73 No. 6, pp. 859-868.
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 1: Statistical Indicators per Question

Q-D1 Do you know where you stand with him/her? Do you usually know how satisfied he/she is with what you do?	<i>Very Often</i> (5)	<i>Often</i> (4)	<i>Sometimes</i> (3)	<i>Occasionally</i> (2)	<i>Rarely</i> (1)	<i>N</i>	<i>Mean</i>	<i>St. Dev</i>
	23.7 %	48.9 %	22.3 %	2.2 %	2.9 %	139	3.88	0.89
Q-D7 How would you characterize your working relationship with him/her?	<i>Very effective</i> (5)	<i>Above average</i> (4)	<i>Average</i> (3)	<i>Below average</i> (2)	<i>Very ineffective</i> (1)			
	21.2 %	51.5 %	18.9 %	6.8 %	1.5 %	132	3.84	0.89
Q-D3 How well does he/she recognize your potential?	<i>Fully</i> (5)	<i>Considerably</i> (4)	<i>Moderately</i> (3)	<i>A little</i> (2)	<i>Not at all</i> (1)			
	20,1 %	47,5 %	25,9 %	4,3 %	2,2 %	139	3.79	0.89
Q-D4 Regardless of how much formal authority he/she has built into his/her position, what are the chances that he/she would use his/her power to help you solve problems in your work?	<i>Certain</i> (5)	<i>High</i> (4)	<i>Moderate</i> (3)	<i>Low</i> (2)	<i>None</i> (1)			
	12.9 %	51.1 %	25.2%	10.1 %	0.7 %	139	3.65	0.86
Q-D6 I have enough confidence in him/her that I would defend and justify his/her decision were he/she not present.	<i>Totally agree</i> (5)	<i>Agree</i> (4)	<i>Neither</i> (3)	<i>Disagree</i> (2)	<i>Totally disagree</i> (1)			
	9.8 %	50.4 %	31.6 %	7.5 %	0.8 %	133	3.61	0.80
Q-D2 How well does he/she understand your job problems and needs?	<i>Fully</i> (5)	<i>Considerably</i> (4)	<i>Moderately</i> (3)	<i>A little</i> (2)	<i>Not at all</i> (1)			
	15.1 %	31.7 %	41.0 %	10.8 %	1.4 %	139	3.48	0.93
Q-D5 Again, regardless of the amount of formal authority he/she has, what are the chances that he/she would “bail you out” at his/her expense?	<i>Certain</i> (5)	<i>A lot</i> (4)	<i>Moderate</i> (3)	<i>Few</i> (2)	<i>None</i> (1)			
	8.6 %	33.1 %	25.2 %	22.3 %	10.8 %	139	3.06	1.16

Source: Authors' Survey

Table 2: Statistical Indicators of the Implementation per Question

	<i>Very High (1)</i>	<i>High (2)</i>	<i>Medium (3)</i>	<i>Low (4)</i>	<i>Very Low (5)</i>	<i>N</i>	<i>Mean</i>	<i>St. Dev</i>
Q-A12 To what extent do you believe that the application of IPSAS in the Hospitals sector will lead you to effectively identify unused resources?	1.5%	11.2%	38.8%	19.4%	29.1%	134	3.63	1.07
Q-A10 To what extent is there appropriate training of staff that allows the implementation of IPSAS in your hospital?	0%	6.4%	24.1%	31.2%	38.3%	141	4.01	0.94
Q-A3 To what extent are you involved in the implementation of IPSAS?	3.5%	21.8%	23.2%	25.4%	26.1%	142	3.49	1.19
Q-A2 To what extent are your employees aware of IPSAS?	0%	11.2%	21.7%	30.1%	37.1%	143	3.93	1.02

Source: Authors' Survey

Figure 1: Results of the Application of the Structural Equation Model