LATENT BENEFITS OF WORKING RELATIONSHIP AMONG NIGERIAN BUILT ENVIRONMENT PROFESSIONALS

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Abstract
The built-environment has some sequential non-overlapping roles towards a successful take-off and delivery of its products- the real estate. However, these roles appeared to be uncoordinated because of the collaboration gap among the built environment professionals (BEP). This may hinder the sustainability of the built environment practice and products. This study investigates the attitudinal issues, the influencing factors, the achieved and potential benefits of the collaborative working relationship among the BEP and how such relationships may enhance the sustainability of the built environment practice and products. Primary data were collected from a sample of 133 fellows of all the BEP bodies in Nigeria through the use of the questionnaire, complemented by a telephone interview. Data were analysed using descriptive statistics and the relative importance index (RII). The study discovered that the BEPs safeguard individual profession against encroachment rather than all the built-environment professions (RII 3.96) and the main factor responsible for weak collaboration among the BEPs was working in isolation (RII 3.99). The main benefit discovered from working collaborations among the BEPs was that it enhanced good and reliable practices and products towards a sustainable built-environment (RII 4.20). It is therefore recommended that the BEPs should not limit the working relationships and collaborations to their professions alone but extends such to other professions in the built-environment to exploit the latent potentials of collaboration. The exploitation of these identified potential benefits will eventually bring about improved real estate products and practice for a sustainable built environment in Nigeria.

Keywords: Built-Environment; Professionals; Collaboration; Real estate; Sustainability.

1.0 Introduction

Built environment activities require the efforts of people who use their hands or skills directly in accomplishing the tasks lined up to produce real estate. This involvement of human resources in the built-environment has physical and non-physical perspectives and typical built environment activities start with site/space provision, planning of the site, architectural and engineering design, estimates of materials and labour, project construction/management and property management.

In the built environment, human resources are composed of two main sets: the tradesmen and the professionals. Tradesmen are craft operatives who are skilled in a particular trade such as metal work, bricklaying, plumbing, painting, woodwork, tiling, electrification, just to name a few. Professionals, unlike tradesmen, usually having a formal education, guided by conventions, standards and shared experiences (Agbola, 2002).

It has been observed that previous researches on collaboration among construction staff abound, but this doesn't apply to all the core professions in the built environment. The focus of most of these past studies, e.g. Buys and Ludwaba (2012); Akintan and Morledge (2013) among others

was limited to the construction aspect of the 3 stages of development (pre-construction, construction, and post-construction) and little mention was made of the pre-construction and post-construction stages. It is unusual to find a study that extended to all the stages of development involving all the BEPs in Nigeria. This is a conspicuous gap in the body of knowledge which this study attempts to fill.

There is, therefore, a need for a study that will include the roles of all the core professionals in the built-environment and span the whole stages of property development i.e. preconstruction, construction, and post-construction, without reducing the scope to the construction stage only. This study, therefore, examined the main factors for and the benefits derivable from collaborative working relationships among the BEPs in all stages of development, towards having sustainable practice and built-environment products in Nigeria.

The objectives of achieving this aim are to: determine the attitudinal issues influencing collaboration among the BEPs; examine the main factors influencing collaboration among the BEPs; determine the existing and potentials benefits of collaboration among the BEPs in Nigeria.

2.0 Literature Review

A profession, according to Mosher (1976), is a reasonably clear-cut occupational field that ordinarily requires higher education at least through the bachelor's level and which offers a lifetime career to its members. In the view of Marcuse (1977), a profession is an activity which utilises technical methods and esoteric knowledge, the acquisition of which typically requires advanced education.

Expected benefits derivable from membership of a profession otherwise called professional bargains include: legally enforced restrictions on entry into the product of activity and monopoly on the undertaking of certain activities of those permitted entry (Agbola, 2002). The professional bargain also requires those undertaking the professional activity to police their conduct, to ensure that it contributes efficiently to the maintenance of the system with which it struck the bargain.

Professionals, unlike the tradesmen, usually have formal education and are guided with conventions, standards and shared experiences (Agbola, 2002). The profession, according to Agbola (2002) often exhibits commonalities of the continuing drive to elevate its status and strengthen its public image, the establishment of the boundary of work scope with exclusive prerogatives to operate.

Other commonalities include the assurance and protection of career opportunities, the establishment and continuous elevation of the standard of education and entrance into the profession, the upgrading of rewards and improvement of their prestige among other professions as well as the public at large. Entry into the profession requires the legal registration by state power to a board that is exclusively and predominantly made up of members of the profession.

The term professional is used to signify persons working within a chosen profession, and in the case of the built-environment such include: architects, land surveyors, builders, estate surveyors and valuers, quantity surveyors and the urban and regional planners. In Nigeria, each of these professionals has both the association and regulatory bodies. For instance, architects have the Nigerian Institute of Architects (NIA) and the Architects Registration Council of Nigeria (ARCON),land surveyors have the Nigerian Institution of Surveyors (NIS) and the Surveyors Registration Council of Nigeria (SURCON),builders have the Nigerian Institute of Builders

(NIOB) and the Council of Registered Builders of Nigeria (CORBON) while estate surveyors and valuers have the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON). Similarly, the quantity surveyors have the Nigerian Institution of Quantity Surveyors (NIQS) and the Quantity Surveyors Registration Board of Nigeria (QSRBN), while the urban and regional planners have the Nigerian Institute of Town Planners (NITP) and Town Planners Registration Council of Nigeria (TOPREC).

According to Saiv and Sagi (2016), professional bodies are saddled with the responsibilities of giving marketing platforms to members; providing a gateway to work and ensuring career development. These alsoorganise continued professional development training and workshops, provide professional indemnity insurance, enhancement of networking opportunities, peer recognition and professional networks; ensuring access to information, resources and advisory notes; ensuring compliance with standards and ethics and creating the opportunity to participate in enhancing and expanding the profession.

Generally, the statutory registration bodies of the built-environment professionals were established to license professionals based on specified standards and to protect the public from errant practitioners (SaivandSagi, 2016). However, there should be a synergy among the professionals in the built environment in the form of collaborations.

Collaboration, according to Oxford Advanced Learner's Dictionary (2015), is the act of working with another person or group of people to create or produce something. It takes the form of two or more people or organisations working together to complete a task or achieve a goal. Collaboration is the same as cooperation or team working.

Teams that work collaboratively often access greater resources, recognition, and rewards when facing competition for finite resources. Collaboration skills will enable the built-environment professionals to interface productively with other professional colleagues either in the same profession or other allied professions. Successful collaboration, however, requires a cooperative spirit and mutual respect.

Saiv and Sagi (2016) formalize the platform for collaboration among the built environment professional in South Africa, as involving networking between the respective professions; education and knowledge sharing about professional specialists competences; working on industry standards and practice notes towards improving service delivery; participation in trade shows/conferences within the built environment and consistency in the registration requirements for professionals across the respective professional associations.

The identified potential benefits of collaboration in the construction industry according to Siti et al., (2013) include: encouragement of teamwork, development of cooperation, stimulation of information sharing, improvement in quality and project completion time, enhanced service quality, and better communication among project members. AbdullRahman et al (2014), in a similar study, identified factors propelling the willingness to collaborate among the BEPs to include: encouragement of teamwork, similar racial collaboration, development of co-operation, information sharing simulation, and improvement of quality of the project promptly and better communication. Stiles (1995) identified the factors influencing global collaborationto include: demand occasion by globalization, competition, risk, and uncertainty within the business environment.

Buys and Ludwaba (2012) identified the problems that may associate with lack of collaboration among the BEPs to include: poor productivity, a decline in construction quality, decreases in client satisfaction of the built-environment products, conflicts and late completion of the built-

environment products. Specifically, the main problem of collaboration among the built-environment in South Africa is that of the organ of the Government generally not using professionals properly in the right space (Saiv and Sagi, 2016).

Akintan and Morledge (2013) highlighted the benefits of collaboration on construction to include: delivering lower building cost for the client and higher profits for the contractor; increase in value and predictability of work; reduces the number and severity of contractual disputes; encourages continuous improvements and; results in shorter overall project time amongst others. These highlighted benefits impact positively on project delivery.

Professionals in the builtenvironment are now realizing that collaboration is critical to the success and sustainability of the built-environment (AbdullRahman et al, 2014). According to Abiola (2017), professional bodies in the builtenvironment, therefore, need to collaborate among themselves for the effective delivery of housing projects as well as the elimination of quackery. In a bid to enhance the sustainability of the built environment product in Nigeria, there is a dire need to investigate the potential factors and benefits of collaboration among the core professionals in the built environment and that is the essence of this study.

3.0 Methodology

The target population for this research consists offellows (the highest membership grade of any profession) of each of the BEPs in Nigeria as obtained from their national secretariat. As at December 2018, the record put the total as 500 for architecture (ARC), 282 for building (BLD), 360 for the estate surveying and valuation (ESV), 363 for urban and regional planning (URP); 302 for the quantity surveying (QTS) and 316 for the surveying and geo-informatics (SVG) bringing the total of fellows in the built-environment profession to 2123.

The choice of relying on the fellowship category is borne out of tenure of post-qualification and volume of gathered experience by this cadre of professionals. Ten (10) percent were randomly taken, using the table of random numbers, as sample size from the list of fellows in each profession to have a total of 212 (50 for ARC; 28 for BLD; 36 for ESM; 36 for URP; 30 for QTS and 32 for SVG).

The questionnaires were administered through the use of hard copy questionnaires, e-mails and telephone interviews as conveniently applicable to the respondents. Questions such as the attitudinal issues of the BEPs, factors influencing the achieved and potential benefits of working collaboration among the BEPs were asked the respondents. However, of 212 questionnaires distributed 133 were successfully retrieved and administered representing a 62.74% response rate which was deemed appropriate for this study. Responses from the administered questionnaires were analysed to produce descriptive statistics of frequency and summation scaling of 5 points as previously adopted by Ayedun et al (2017) among others.

Five (5) points embraced SA, A, N, D, SD, representing strongly agree (5), agree (4), neutral (3), disagree (2) and strongly disagree (1) respectively. The frequency of each response was multiplied by the point allocated to the response to have the frequency weight (FW) used to calculate the relative importance index (RII).

4.0 Results and Findings

Most of the fellows in the built-environment professions, consisting of 96 respondents (72%) attained the status of fellow of their professional bodies between 10 and 20 years, while 37(28%) were fellow of more than 20 years. The attitude of BEPs to the working collaboration among the built-environment professionals is shown in Table 1.

Table 1 Attitudinal issues among the BEPs

Attitude of BEP to working collaboration	SA	A	N	D	SD
Selling out of one profession cheaply	07	06	03	52	65
Selling out of sister profession cheaply	49	55	05	18	06
Safeguarding my profession from encroachment by other professionals	58	49	04	07	15
Safeguarding of other professions in the builtenvironment	03	08	07	52	64

Source: Authors' Field Work (2018)

Sixty-five respondents strongly disagreed that professional members were selling out their profession cheaply, 55 respondents agreed that they sold out their sister professions cheaply. Fifty-eight of the respondents strongly agreed that they safeguarded their professions from encroachment by other professionals, while 64 respondents strongly disagreed that they safeguarded their profession from encroachment by other professions in the built environment.

This was confirmed by the summation scaling in Table 2, where collaborative efforts towards the safeguarding of one's profession from encroachment by other professions were ranked first with a RII score of 3.96, while safeguarding of other sister professions in the built environment was ranked the least with a RII score of 1.76.

Table 2: Summation scaling of response of current collaboration level among the BEP

OPTIONS	SA FW (5)	A FW (4)	N FW (3)	D FW (2)	SD FW (1)	TFW	Mean (RII)	Rank
Selling out of one's profession cheaply	35	24	09	104	65	237	1.78	3RD
Selling out of sister professions cheaply	245	220	15	36	06	522	3.92	2ND
Safeguarding my profession from encroachment by other professionals	290	196	12	14	15	527	3.96	1ST
Safeguarding of other professions in the built environment	15	32	21	102	64	234	1.76	4TH

Source: Author's Field Work (2018).

Table 3 exhibited the frequency of factors responsible for the existing state of collaboration among the built-environment professionals. In Table 3 it was shown that 41 respondents strongly agreed that personal greed of the professionals was responsible for the attitude of the BEPs, 43 strongly disagreed that lack of proper regulation by the professional regulatory bodies was responsible while 43 disagreed that lack of clear-cut government policies on operating boundaries among the BEPs is the attitudinal issue responsible for the current state of collaboration among the BEPs.

Table 3: Factors responsible for the current level of collaboration

FACTORS	SA	A	N	D	SD
Personal greed of the professionals	41	38	11	21	22
Lack of proper regulations by the professional regulatory bodies	18	32	02	38	43
Lack of clear-cut Government policies on operating boundaries among the built environment professionals	14	31	07	43	38
Working in isolation among the professionals	40	62	04	18	09
Working in isolation among the professional bodies	61	42	03	22	05
Clients' (Government, Corporate or individual) patronage of the inappropriate professionals for the built environment briefs	56	48	07	12	10

Source: Authors' Field Work (2018)

In Table 3 it can be observed that 62 of respondents agreed that working in isolation among the professionals is the main factor for the state of collaboration among the BEPs, but 61 strongly agreed that the main factor is working in isolation among the professional bodies, while 56 strongly agreed that it is the clients' patronage of inappropriate professionals among the BEPs that is responsible for the poor state of collaboration among the BEPs.

The finding in Table 4 is very specific by identifying working in isolation among the professional bodies as the main factor as ranked first with RII of 3.99 while lack of proper regulations by the professional regulatory bodies was ranked the least occupying the 6th position with a RII of 2.57.

These findings suggest that there was appropriate regulation of practice by the regulatory bodies in the BEP, but there was isolation among the regulatory bodies that eventually lead to weak working collaboration among these professional regulatory bodies.

Table 4: Summation scalingof factors responsible for the current level of collaboration

FACTORS	SA FW (5)	A FW (4)	N FW (3)	D FW (2)	SD FW (1)	TFW	Mean (RII)	Rank
Personal greed of professionals	205	152	33	42	22	454	3.41	3rd
Lack of proper regulations by the professional regulatory bodies	90	128	06	76	43	343	2.57	6th
Lack of clear-cut Government policies on operating boundaries among the built environment professionals	70	124	21	86	38	339	2.54	5th
Working in isolation among the professionals	200	248	12	36	09	505	3.79	3rd
Working in isolation among the professional's bodies	305	168	09	44	05	531	3.99	1st
Clients' (Government, Corporate or individual) patronage of the inappropriate professionals for the built environment briefs	280	192	21	24	10	527	3.96	2nd

Source: Authors' Field Work (2018)

For the potentials that are latent in working collaboration among the BEPs, Table 5 reflects that 55 professional fellows agreed that splitting of voluminous work among professionals has untapped collaboration potentials, 57 agreed that joint execution of built-environment projects, 48 agreed that rotating retainership among the BEP is an untapped potential source of collaboration among the BEPs. However, 48 respondents disagreed that a potential collaboration is derivable from the sequential ordering of professional services.

Table 5: Frequency of untapped potential collaboration among the BEP

POTENTIALS OF COLLABORATION	SA	A	N	D	SD
Split of voluminous work among the professional members	18	55	33	17	10
Joint execution of built environment project	23	57	17	16	30
Rotational retainer-ship among professionals	41	48	23	11	10
Sequential ordering of professional services	15	33	18	48	19
Deliberate joint actions against usurping by non-professionals	68	42	01	13	09
Formation of Consortium of built environment professionals	20	26	06	68	13
Recommendation of sister professionals to the client in need of services of sister professionals	56	50	07	15	05

Source: Author's Field Work (2018)

Sixty-eight respondents strongly agreed that deliberate joint actions against usurpation by non-professionals were an untapped potential forcollaboration among the BEPs. The formation of a consortium of BEP was disagreed with by 68 respondents while the recommendation of sister professionals to a client was perceived to behave of potentials forcollaboration by 56 respondents.

These findings revealed that deliberate cooperation against the quacks had the greatest potential for BEP collaborations, but there is no potential of collaboration in the formation of the consortium firm among the BEPs. Summation scaling in Table 6 also confirmed the finding that there is a great element of potential collaboration if there is a joint action against the non-professionals in the built-environment as reflected by its RII of 4.11 ranking first. However, the sequential ordering of professional services was ranked the least unexploited potential of collaboration among the BEP.

Table 6: Summation scaling of untapped potential collaboration among the BEP

POTENTIAL OF COLLABORATIONS	SA (5)	A (4)	N (3)	D (2)	SD (1)	TFW	Mean (RII)	Rank
Split of voluminous work among the professional members	90	220	99	34	10	453	3.41	5TH
Joint execution of built environment project	115	228	51	32	30	456	3.43	4TH
Rotational retainership among professionals	205	192	69	22	10	498	3.74	3RD
Sequential ordering of professional services	75	132	54	96	19	376	2.83	7TH
Deliberate joint actions against usurping by non-professionals	340	168	03	26	09	546	4.11	1ST
Formation of Consortium of built environment professionals	100	104	18	136	13	371	2.79	6TH
Recommendation of sister professionals to the client in need of services of sister professionals	280	200	21	30	05	536	403	2ND

Source: Authors' Field Work (2018)

As reflected in Table 7, 63 respondents strongly agreed that the main benefit of collaboration among the BEP is that it enhances good and reliable built-environment products towards sustainable-built-environment while 71 respondents strongly disagreed that there may not be any benefits derivable from working relationship collaboration among the BEP.

Table 7: Benefits derivable from collaboration among BEP

BENEFITS	SA	A	N	D	SD
Enhance and sustain increment in the volume of professional briefs	49	58	13	09	04
Enhance the improvement in the volume of professional fees	28	53	18	19	15
Reduces quackery for improved professionalism	53	49	11	07	13
Accord due regards to built-environment professionals by the corporate and Government entities	33	50	31	08	11
Enhance good and reliable built environment products towards a sustainable built environment	63	51	08	04	07
There may not be any benefits achievable from working relationship collaboration.	11	16	07	28	71

Source: Authors' Field Work (2018)

Scaling of the benefits that are derivable from a collaborative working relationship is presented in Table 8, where the enhancement of good and reliable built-environment products towards sustainable built-environment is ranked first with RII of 4.20 and that there may not be any achievable working relationship collaboration is ranked sixth and the least confirming that there are benefits achievable from the working collaboration among the BEP and that such working collaboration will enhance good and reliable built-environment products which in turn will ensure the sustainability of the builtenvironment.

Table 8: Summation scaling of benefits achievable from collaboration among BEP

BENEFITS	SA (5)	A (4)	N (3)	D (2)	SD (1)	TFW	Mean (RII)	Rank
Enhance and sustain increment in the volume of professional briefs	245	232	39	18	04	538	4.05	2nd
Enhance the improvement in the volume of professional fees	140	212	54	38	15	459	3.45	5th
Reduces quackery for improved professionalism	265	196	33	14	13	521	3.91	3rd
Accord due regards to built environment professionals by the corporate and Government entities	165	200	93	16	11	485	3.64	4th
Enhance good and reliable built-environment products towards a sustainable built environment	315	204	24	08	07	558	4.20	1st
There may not be any benefits achievable from working relationship collaboration.	55	64	21	56	71	267	2.01	6th

Source: Authors' Field Work (2018)

5.0 Discussion of Findings

The findings of this study deviate from previous studies by spanning across most professions in the built environment and embraced the pre-construction, construction and post-construction stages of real estate development altogether.

The findings reflected that the attitudinal issues influencing collaboration among the BEP implied that professionals in the built-environment safeguard against encroachment on their professions, but they are not much concerned about the safeguarding of other sister professions. This isolation gap demonstrates one of the various ways by which quacks and non-professionals in the BEP penetrate the practice of built-environment professions.

A situation where each distinct profession is only concerned about aspects of its profession alone, but not bothered about others will not be beneficial to the BEPs. For instance, when the land surveyor is not bothered who is going to design the building to be constructed on the land surveyed by him or where an architect is less concerned about who cost or builds the structure he designed. In the same vein, when a builder does not care if the completed product of the

built-environment activities is given to a roadside mechanic to handle its post-occupation management, it will be at a great disadvantage to the clients as well as the end product of the built-environment activities.

The implication of findings on factors affecting the collaboration among the BEPs suggests that there is appropriate regulation of practices by the regulatory bodies of the BEP in Nigeria, but there is isolation among the regulatory bodies that eventually leads to weak working collaboration among these professional regulatory bodies. These findings revealed that deliberate cooperation against the quacks has the greatest potential for BEP collaboration, but there is no potential of collaboration in the formation of the consortium firm among the BEPs.

It is also observed that there are some benefits achievable from working collaboration among the BEPs, and the prominent one is that it will enhance reliable practice among the BEPs as well as produce reliable built environment products that will be to the satisfaction of the built-environment owners and investors.

There are benefits achievable from the working collaboration among the BEP and such working collaborations will enhance good and reliable built-environment products which in turn will ensure the sustainability of the built-environment. This is possible because an effective collaboration will ensure not only the sustainability of practice among the professionals; it will also ensure well finished built-environment products and its sustainability to the satisfaction of the clients.

6.0 Conclusion and Recommendations

Some potential benefits of working collaborations among the BEP have been established by this study, which if harnessed will eventually bring about improved real estate products and practice for a sustainable built environment in Nigeria.

Professionals in the built-environment should, therefore, maintain the status quo and not to get involved in other professions areas of competence and bear only their noted name in the built environment. This should be the first attempt towards the sustainability of working collaboration among the BEP.

Since the finding of this research indicated that each professional affiliate preferred to safeguard against encroachment into his profession, it is advised that such safeguarding should be extended to other professional affiliates in the BEP and a fight against quackery should be a joint battle of all the professionals in the built environment.

The government at all levels should understand clearly the scope of each professional discipline, give it due regards and avoid legislation, policies or actions that can cause overlap or conflict of duties among the BEP. Further, the government should make it a point of duty to always recognize professional members for patronage matters related to each profession specifically instead of giving what belongs to one profession to another.

In conclusion, BEPs should be guided by the scope of professional duties and keep within its limits. Personal greed, selfishness, and personal materialism at the expense of one's profession should not be tolerated by any of the built-environment professional bodies.

Endnote:

[1]Adopting the sample size graph of Bartlett, Kotrlik, and Higgins (2001) which is statistically adequate for analysis and generalization

REFERENCES

AbdullRahman, S.H., Endut, I.R., Faisol, N. and Paydar, S. (2014). The importance of collaboration in construction industry from contractors' perspectives, *Science Direct Procedia-Social and Behavioural Sciences* 129(2014), 414-421.

Abiola, A. (2017). Regulatory authorities: panacea for building project delivery in Lagos, the annual conference of the Nigerian Institute of Building, 29TH October.

Agbola, T. (2002). Housing as a profession, paper presented at the Association of housing and management students one day seminar held on August 22, 2002, at Cocoa House, Ibadan.

Akintan O.A. and Morledge R. (2013) Improving the collaboration between main contractors and subcontractors within traditional construction procurement. *Journal of Construction Engineering,* Article ID NO. 281236

Ayedun, C.A., Ojelade, O.K., Durodola, D.O. and Oni, S.A. (2017). Examination of graduates of Estate Management employer's skill expectations and real estate education in Nigeria, *The Estate Surveyor and Valuer, the Journal of the Nigerian Institution of Estate Surveyors and Valuers,* 40(2), 14-26.

Buys, F. and Ludwaba, D. (2012). The potential of built-environment professionals construction towards emerging contractors' development, *Acta Structilia* 19(2), 74-89

Chan A.P.C, Scott D. and Chan A.P.L. (2004) Factors affecting the success of a construction project. *Journal of Construction Engineering and Management* 130 (1), 153-155

Marcuse, P. (1977). Some political implications of planning; professionalism, ethics and planning theory in Noyelle, T (ed), 1976 symposium on planning theory, department of city and regional planning, University of Pennsylvania, Philadelphia, 23-28.

Mosher, F.C. (1976). The professional state in Stillman, R.J. Public administration concepts and cases p. 120-135

Oxford Advanced Learner's Dictionary (2015) International student's edition, new 8th edition, Oxford University Press.

Saiv, J.C andSagi, P.N. (2016). Strengthening collaboration between professionals within thebuilt environment: why we need to be talking to one another, *Geomatics Indaba* 2016, stream 1, 56-61.

Siti H.A, Intan R.E, Nasruddin F, and Soleyman P. (2013). *The importance of collaboration in construction industry from contractors' perspectives.* A paper presented at the International Conference on Innovation, Management and Technology Research (ICIMTR), Malaysia, 22 to 23 September.

Stiles, J (1995). Collaboration for competitive advantage: the changing world of alliances and partnerships, *Long range planning* 28(5), 8-9.