

Intellectual Capital of Social Sciences and the Efficiency of its Formation at the Scientific Institutions

Inese Spica, Baiba Berzina, Ernests Spics and Rozite Katrina Spica

Scientific Institution Business Competence Centre, Riga, Latvia

inese.spica@gmail.com

baiba.berzina@tvnet.lv

ernests.spics@gmail.com

rozite.spica@gmail.com

Abstract: The theme of the research is topical in the present situation of intellectual capital of social sciences (ICSS) formation at the scientific institutions (SI) in Latvia. The object of the present research is the formation of ICSS at the SI. The subject of the research is a comparative analysis of the efficiency of the involvement of academic staff and students in the formation of ICSS at the SI of Latvia. The objective of the research is to study the involvement of academic staff and students in the formation of ICSS at the SI in Latvia from 2013 till 2018. The tasks are advanced in order to reach the objective: to study the ICSS formation at the SI; to identify the concept of the efficiency of the involvement academic staff and students in the formation of ICSS; to calculate their main indicators; to carry out comparative analyses of indicators characterising the efficiency of the involvement academic staff and students in the formation of ICSS at the SI in Latvia. Research methods used in the paper are content analysis, economic analysis and economic experiment.

Keywords: intellectual capital indicators, social sciences, scientific institution, academic staff, students

1. Introduction

Every six years, the Ministry of Education and Science of the Republic of Latvia (IZM) shall organise an international evaluation of the scientific institutions registered in Latvia. The previous International Evaluation of Scientific Institutions' Activity (IESIA) in Latvia covered the period from 2006 to 2011. The last IESIA took place in the period from 2013 to 2018. In order to establish the dynamics of the efficiency indicators of the academic staff involved in the formation of ICSS at the SI of Latvia (IZM, 2021), the authors used the output data of findings across the set of social sciences institutions evaluations per period from 2013 to 2018 offered by "Technopolis-group" (TG).

TG developed the above IESIA for the period from 2006 to 2011 and from 2013 to 2018 by the similar methodology. Consequently, it provides an opportunity for the authors to calculate the IC indicators in social sciences at the SI of Latvia and to compare their dynamics during the period from 2013 to 2018.

The comparative analysis of efficiency indicators of involvement of the academic staff of social sciences at the SI of Latvia in the IC formation will enable them to know whether and how the technological business environment affects them. IESIA happened during the economic crisis caused by Covid-19. Data of the comparative analysis will help to develop support programs to increase the efficiency of involvement of the academic staff in the IC formation. In addition, the comparative analysis will reveal whether the score of social sciences at the SI of Latvia in the IESIA of TG coincides with the place of the SI of Latvia in the ratings of the IC indicators, and whether the overall score of the SI of Latvia also reflects the efficiency of the involvement of the academic staff of the SI of Latvia in the IC formation.

Hypothesis: The overall score of the SI shows the efficiency of the IC formation in the SI of Latvia.

2. Theoretical background

The authors rely on historical development of the concept of IC in higher education establishments, the increasing IC capacity (Brenca and Garleja, 2013; 2016), research of understanding, adapting, applying IC in universities (Mercado-Salgado et al, 2016), and research of the role of human capital in educational-training process at the university (Contu, 2017) presented different aspects of IC. Spica et al (2017a) state that IC is an economic category, the spiritual value created by the human potential, and it can be accumulated and converted into the value of other capitals. By investigating certain information about the management of education, we can increase the capacity and significance of the country's total economic capital movement. Spica et al (2017a; 2017b) have worked out four indicators of the efficiency of the formation of IC in the higher education establishment: (1)The efficiency of the involvement of academic staff in the formation of IC per year in

percentages (AIK); (2)The efficiency of the involvement of academic staff with a Doctorate degree in the formation of IC per year in percentages (DIK); (3)The efficiency of the involvement of students in the formation of IC per year in percentages (SIK); (4)Mutual efficiency of the involvement members of the academic staff with Doctorate degrees and the academic staff without Doctorate degrees in the formation of IC per year in times, (DE).

3. Methodology

In order to calculate the AIK, DIK, SIK, and DE of the HEE Spica et al (2017a; 2017b) have worked out four formulas: (1) $AIK = (ZPS : AS) \times 100$; (2) $DIK = (ZPS : DS) \times 100$; (3) $SIK = (ZPS : SS) \times 100$; (4) $DE = DIK : AIK$. Where: ZPS represents the number of scientific publications of the HEE per year; AS represents the number of academic staff in full-time jobs per year; DS represents the number of academic staff with Doctorate degrees holding in full-time jobs per year; SS represents the number of students per year.

The authors modified the above mentioned formulas for the purposes of the study. Namely, calculate IC efficiency indicators for total numbers of full time equivalent (FTE) academic and research personnel (KIK), for FTE academic personnel (AIK), for FTE academic research personnel (PIK) and for PhDs completed at the SI (SIK). In addition, all the authors of the above-mentioned IC efficiency indicators were calculated for different forms of IC. Such as total number of self-reported outputs of IC (KS), articles in peer reviewed scientific edited journals and conference proceeds included in WoS or SCOPUS (WS), articles in peer reviewed edited journals and conference proceedings not included in WoS or SCOPUS(RS), monographs (MS), patent Latvian (LPS) and patent of Europe and International patents (EPS). The authors calculated mutual efficiency indicators (PE) regarding involvement of the FTE academic research personnel (PS) and the FTE academic personnel (AS) in the formation of IC. in times.

In the present research, the authors used the following data from the IESIA: output data on the number of FTE academic personnel (AS), the number of FTE academic and research personnel (PS), the total number of FTE academic and research personnel (KS), the number of PhDs completed (SS), the number of articles in peer reviewed scientific edited journals and conference proceedings included in WoS or SCOPUS (WS), the number of articles in peer reviewed scientific edited journals and conference proceedings not included in WoS or SCOPUS (RS), the number of monographs (MS), the number of patents Latvian (LPS), the number of Europe and International patents (EPS) and total number of self-reported outputs (KS) in period 2013-2018 per SI. of social sciences in Latvia. Authors revised the above WS, RS, MS, LPS, EPS and KS for the year.

The number of scientific publications and patents are the main results of IC formation of SI. TG analysed 15 SI of Latvia. In the IESIA there were collected output data on 11 public SI of Latvia including 5 Latvian universities, and on 4 SI of Latvia founded by legal entities or private SI.

During the period analysed in the IESIA, there were only 15 such SI of Latvia: The BA School of Business and Finance (SBF/S); RISEBA Faculty of Business and Economy (RISEBA/S); ISMA Business Laboratory (ISMA/S); Rezekne Academy of Technology, Research Institute for Regional Studies (RAT/RS); Rezekne Academy of Technology, Research Institute for Business and Social Processes (RAT/BS); Vidzeme University of Applied Sciences (VU); Foundation "Baltic Studies Centre" (BSC); Riga Stradins University, Platform of Social Sciences (RSU/S); Center for Security and Strategic Research (CSSR); Daugavpils University research programme "Educational sciences, psychology, economy, and law" (DU/S); Liepaja University Educational Sciences Unit (LU/ES); Faculty of Engineering Economics and Management, Riga Technical University (RTU/S); Latvia University of Life Sciences and Technologies Social Sciences (UL/LT); Economy and Entrepreneurship Unit, Liepaja University (LU/EE); Cluster of Social Sciences, University of Latvia (UL/SS).

In this study, one scientific publication or one patent are accepted as one unit of IC. Further, using the modified formulas 1; 2; 3; and 4, were calculated: KIK, AIK, PIK, SIK, PE. Then, according to the results obtained through the author's calculations, a corresponding rating place was assigned to each SI of Latvia per year and each of the above indicators KIK, AIK, PIK and SIK.

Each rating location was then assessed with an appropriate score, where the lowest score is 1 point, while the highest score is 5 points. Thus the SI, who took the first to third place in the KIK, AIK, PIK and SIK received 5 points in the ranking, took fourth to sixth place - received 4 points, seventh to ninth place - received 3 points,

tenth to twelfth place - received 2 points and thirteenth place - received 1 point. The above mentioned assessment system makes it possible to compare the quantitative efficiency indicators of SI of Social Science in Latvia calculated by the authors with IESIA overall assessment criterion - quality of the research performance of the SI. The relevant Panel of the TG was a score of the research performance of each SI using the scale, where score 5 means outstanding level of research, score 4 means very good level of research, score 3 means good level of research, score 2 means adequate level of research, score 1 means poor level of research (IZM, 2021). The score assigned to the overall assessment by the relevant Panel of the TG was based on the assessment of five sub elements A to E, where element A characterises the quality of the research, element B - the impact on the development on the field of science, element C - the economic impact and social impact of the research, element D - the research environment and infrastructure of the institution, element E -the development potential of the institution. The Panel was provided with scores against each sub-element and the overall score and was also provided with narrative descriptions of their scores, the overall score and the sub-elements (IZM, 2021).

The follow-up authors compared the results of their own estimates of SI quantitative indicators to the relevant Panel of the TG's results of qualitative indicators, calculated the difference between the indicators and the changes. For this purpose, the authors calculated for each SI average score of indicators recording efficiency of IC and compared these scores with scores of quality of the research of each SI and overall score developed by Panel of the TG.

4. Results

From the IESIA, it follows that in Latvia 11 SI corresponding fields of science are Economics and Business, 7 SI corresponding fields of science - Educational Sciences, 5 SI corresponding fields of science - Other Social Sciences. In turn, such co-responding fields of sciences as Psychology; Social Science; Social and Economic Geography; Media and Communications operated 3 SI in each field of science.

According to the authors' estimates, from the IESIA data, the total number of self-reported outputs of SI, the largest proportion is taken by the RS - 50,77%, a, followed by the WS - 44,00%, the MS - 5,08%, the LPS - 0,13%, the EPS - 0,02%.

To calculate the efficiency of the involvement of academic and research personnel in the formation of WS, the authors used formulas that were developed and approbated already before and now modified.

$$AIK = (WS : AS) \times 100 \quad (1)$$

$$PIK = (WS : PS) \times 100 \quad (2)$$

$$KIK = (WS : KS) \times 100 \quad (3)$$

$$SIK = (WS : SS) \times 100 \quad (4)$$

$$PE = PIK : AIK \quad (5)$$

These indicators of SI and their place in the rating of SI of SS in Latvia, and its scores are summarized in Table 1. The table of the SI indicators, ratings and score was made by authors. The summarized indicators show that in general, In Table 1, the figure rests in the range from 15% to 1650% in respect of the SI in Latvia. The highest indicator is PIK in the RISEBA/S, but the lowest indicators are PIK and KIK in the CSSR. Comparing the figures collected in Table 1, the authors conclude that the highest AIK indicator of 596% is for the RAT/RS, while the lowest AIK indicator of 59% is for the LU/EE, the highest KIK indicator of 278% is for the ISMA/S, while the lowest KIK indicator of 15% is for the CSSR, the highest SIK indicator of 667% is for RAT/BS, while the lowest SIK indicator of 58% is for CSSR. The PS of the RISEBA/S is 7,6 times more efficient in the WS formation, while the PS of the VU is only 0,3 times more efficient.

In Table 1, the authors created the rating and score of the SI in Latvia based on the AIK, PIK, KIK, SIK indicators of the efficiency of the academic research personnel and PhDs involvement in the formation of WS. According to the AIK indicator, the first place and highest score is taken by the RAT/RS, according to the PIK indicator the first place and highest score is taken by the RISEBA/S, according to the KIK indicator the first place and highest score is taken by the ISMA/S and according to the SIK indicator the first place and highest score is taken by the RAT/BS.

On the other hand, when comparing the average KIK without SIK, the highest score are obtained by the ISMA/S and RSU/S, while comparing the average KIK with SIK - the highest score is obtained in RAT/RS.

The authors compared the SIK indicators of all students of Higher Education Establishments (HEE) in Latvia to that SIK indicators of PhDs students of the SI of the HEE and found that the SIK indicators of the PhDs students were infinitely higher. It follows from the study by Spica et al (2018) that in 2013 the highest SIK indicator of 1,45% was for Daugavpils University and 1,82% for the University of Latvia in 2014. Meanwhile, between 2013 and 2018, the highest annual SIK indicator for PhDs students was the RAT/BS and represented 667%.

In Table 2 authors calculate efficiency of the involvement of academic and research personnel in the formation of RS, the authors used formulas 6; 7; 8; 9; 10.

$$AIK = (RS : AS) \times 100 \quad (6)$$

$$PIK = (RS : PS) \times 100 \quad (7)$$

$$KIK = (RS : KS) \times 100 \quad (8)$$

$$SIK = (RS : SS) \times 100 \quad (9)$$

$$PE = PIK : AIK \quad (10)$$

Table 1: The efficiency of the involvement of academic and research personnel in the formation of WS at the SI in Latvia per year in period 2013-2018 (%)

SI	AIK (%)	AIK rating	AIK score	PIK (%)	PIK rating	PIK score	KIK (%)	KIK rating	KIK score	Average of AIK & PIK score	PE in times	SIK (%)	SIK rating	SIK score	Average of AIK & PIK & SIK score
SBF/S	76	12	2	242	8	3	58	12	2	2,5	3,2	81	10	2	2,3
RISEBA/S	217	6	4	1650	1	5	192	4	4	4,5	7,6	103	9	3	4,0
ISMA/S	556	2	5	556	3	5	278	1	5	5,0	1,0	0	0	0	3,3
RAT/RS	596	1	5	514	5	4	276	2	5	4,5	0,9	327	4	4	4,3
RAT/BS	77	11	2	136	11	2	49	13	1	2,0	1,8	667	1	5	3,0
VU	289	4	4	90	13	1	69	10	2	2,5	0,3	156	7	3	2,7
BSC	0	0	0	92	12	2	92	7	3	1,0	0	0	0	0	0,7
RSU/S	345	3	5	729	2	5	234	3	5	5,0	2,1	71	11	2	4,0
CSSR	0	0	0	15	15	1	15	15	1	0,5	0	58	13	1	0,7
DU/S	109	8	3	474	6	4	89	8	3	3,5	4,3	647	2	5	4,0
LU/ES	92	10	2	155	10	2	58	11	2	2,0	1,7	148	8	3	2,3
RTU/S	169	7	3	290	7	3	107	6	4	3,0	1,7	236	5	4	3,3
UL/LT	226	5	4	545	4	4	160	5	4	4,0	2,4	222	6	4	4,0
LU/EE	59	13	1	89	14	1	35	14	1	1,0	1,5	550	3	5	2,3
UL/SS	105	9	3	218	9	3	71	9	3	3,0	2,1	61	12	2	2,7
Average	144			256			92				1,8	112			

In the first two tables, the average indicators AIK, PIK, KIK, SIK and PE are the same. In Table 2 the figure rests in the range from 24% to 900% in respect of the SI in Latvia. The highest indicator is PIK in the RISEBA/S, but the lowest indicators are SIK in the RSU/S.

In Table 3 authors calculate efficiency of the involvement of academic and research personnel in the formation of MS, the authors used formulas 11; 12; 13; 14; 15.

$$\text{AIK} = (\text{MS} : \text{AS}) \times 100 \quad (11)$$

$$\text{PIK} = (\text{MS} : \text{PS}) \times 100 \quad (12)$$

$$\text{KIK} = (\text{RS} : \text{KS}) \times 100 \quad (13)$$

$$\text{SIK} = (\text{RS} : \text{SS}) \times 100 \quad (14)$$

$$\text{PE} = \text{PIK} : \text{AIK} \quad (15)$$

Table 2: The efficiency of the involvement of academic and research personnel in the formation of RS at the SI in Latvia per year in period 2013-2018 (%)

SI	AIK (%)	AIK rating	AIK score	PIK (%)	PIK rating	PIK score	KIK (%)	KIK rating	KIK score	Average of AIK & PIK score	PE in times	SIK (%)	SIK rating	SIK score	Average of AIK & PIK & SIK score
SBF/S	212	4	4	675	2	5	161	3	5	4,5	3,2	225	7	3	0,7
RISEBA/S	118	8	3	900	1	5	105	7	3	4,0	7,6	56	12	2	3,3
ISMA/S	0	0	0	0	0	0	0	0	0	0,0	0,0	0	0	0	0,0
RAT/RS	468	1	5	404	5	4	217	1	5	4,5	0,9	257	6	4	4,3
RAT/BS	69	12	2	122	12	2	44	13	1	2,0	1,8	600	3	5	3,0
VU	228	3	5	71	13	1	54	11	2	3,0	0,3	123	10	2	2,7
BSC	0	0	0	175	10	2	175	2	5	1,0	0,0	0	0	0	0,7
RSU/S	117	9	3	248	8	3	80	9	3	3,0	2,1	24	13	1	2,3
CSSR	0	0	0	39	14	1	39	14	1	0,5	0,0	150	9	3	1,3
DU/S	137	7	3	596	3	5	111	6	4	4,0	4,4	814	1	5	4,3
LU/ES	161	6	4	272	7	3	101	8	3	3,5	1,7	260	5	4	3,7
RTU/S	233	2	5	401	6	4	147	4	4	4,5	1,7	325	4	4	4,3
UL/LT	182	5	4	438	4	4	129	5	4	4,0	2,4	178	8	3	3,7
LU/EE	82	11	2	124	11	2	49	12	2	2,0	1,5	767	2	5	3,0
UL/SS	100	10	2	208	9	3	67	10	2	2,5	2,1	58	11	2	2,3
Average	144			256			92				1,8	112			

Comparing the figures collected in Table 2, the authors conclude that the highest AIK indicator of 468% is for the RAT/RS, while the lowest AIK indicator of 69% is for the RAT/BS, the highest PIK indicator of 900% is for the RISEBA/S, while the lowest PIK indicator of 39% is for the CSSR, the highest SIK indicator of 814% is for DU/S, while the lowest SIK indicator of 24% is for RSU/S.

When comparing the average AIK and PIK, the highest score are obtained by the SBF/S, the RAT/RS and the RTU/S, while comparing the average KIK with SIK - the highest score is obtained in the RAT/RS, the DU/S and the RTU/S..

Table 3: The efficiency of the involvement of academic and research personnel in the formation of MS at the SI in Latvia per year in period 2013-2018 (%)

SI	AIK (%)	AIK rating	AIK score	PIK (%)	PIK rating	PIK score	KIK (%)	KIK rating	KIK score	Average of AIK & PIK score	PE in times	SIK (%)	SIK rating	SIK score	Average of AIK & PIK & SIK score
SBF/S	3	12	2	8	13	1	2	14	1	1,5	2,7	3	12	2	1,7
RISEBA/S	22	5	4	167	2	5	19	5	4	4,5	7,6	10	9	3	4,0
ISMA/S	79	3	5	79	3	5	40	3	5	5,0	1,0	0	0	0	3,3
RAT/RS	91	2	5	79	4	4	42	2	5	4,5	0,9	50	4	4	4,3
RAT/BS	0	0	0	0	0	0	0	0	0	0,0	0,0	0	0	0	0,0
VU	51	4	4	16	10	2	12	6	4	3,0	0,3	27	6	4	3,3
BSC	0	0	0	4	14	1	4	13	1	0,5	0,0	0	0	0	0,3
RSU/S	137	1	5	290	1	5	93	1	5	5,0	2,1	28	5	4	4,7
CSSR	0	0	0	24	7	3	24	4	4	1,5	0,0	92	1	5	2,7
DU/S	10	7	3	45	5	4	8	8	3	3,5	4,5	61	3	5	4,0
LU/ES	9	8	3	16	11	2	6	10	2	2,5	1,8	15	8	3	2,7
RTU/S	14	6	4	24	6	4	9	7	3	4,0	1,7	20	7	3	3,7
UL/LT	8	11	2	20	8	3	6	11	2	2,5	2,4	8	10	2	2,3
LU/EE	9	10	2	14	12	2	5	12	2	2,0	1,6	83	2	5	3,0
UL/SS	9	9	3	19	9	3	6	9	3	3,0	2,1	5	11	2	2,7
Average	16			28			10				1,8	12			

In Table 3, according to the AIK , PIK and KIK indicators the first place and highest score is taken by the RSU/S, according to the SIK indicator the first place and highest score is taken by the CSSR.

When authors compared the average AIK and PIK, the highest score are obtained by the ISMA/S and the RSU/S, while compared the average AIK, PIK and -SIK, the highest score is obtained only in the RSU/S..

In Table 4 authors calculate efficiency of the involvement of academic personnel and research personnel in the formation of LPS, the authors used formulas 16; 17; 18; 19; 20.

$$\text{AIK} = (\text{LPS} : \text{AS}) \times 100 \quad (16)$$

$$\text{PIK} = (\text{LPS} : \text{PS}) \times 100 \quad (17)$$

$$\text{KIK} = (\text{LPS} : \text{KS}) \times 100 \quad (18)$$

$$\text{SIK} = (\text{LPS} : \text{SS}) \times 100 \quad (19)$$

$$\text{PE} = \text{PIK} : \text{AIK} \quad (20)$$

In Table 4, according to the AIK, PIK, KIK and SIK indicators the first place and highest score is taken by the UL/LT. The average score for all SI is the same.

Table 4: The efficiency of the involvement of academic and research personnel in the formation of LPS at the SI in Latvia per year in period 2013-2018 (%)

SI	AIK (%)	AIK rating	AIK score	PIK (%)	PIK rating	PIK score	KIK (%)	KIK rating	KIK score	Average of AIK & PIK score	PE in times	SIK (%)	SIK rating	SIK score	Average of AIK & PIK & SIK score
RAT/RS	3	2	5	3	2	5	1	2	5	5,00	1,0	2	2	5	5,00
RTU/S	1	3	5	1	3	5	0	3	5	5,00	1,0	1	3	5	5,00
UL/LT	3	1	5	8	1	5	2	1	5	5,00	2,7	3	1	5	5,00
Average	0,45			0,80			0,29				1,8	0,35			

In Table 5 authors calculate efficiency of the involvement of academic personnel and research personnel in the formation of EPS, the authors used formulas 21; 22; 23; 24; 25.

$$\text{AIK} = (\text{EPS} : \text{AS}) \times 100 \quad (21)$$

$$\text{PIK} = (\text{EPS} : \text{PS}) \times 100 \quad (22)$$

$$\text{KIK} = (\text{EPS} : \text{KS}) \times 100 \quad (23)$$

$$\text{SIK} = (\text{EPS} : \text{SS}) \times 100 \quad (24)$$

$$\text{PE} = \text{PIK} : \text{AIK} \quad (25)$$

Of the 15 Latvian SI in the field of social sciences, only the RTU/S has the Europe and International patent.

Table 5: The efficiency of the involvement of academic and research personnel in the formation of EPS at the SI in Latvia per year in period 2013-2018 (%)

SI	AIK (%)	AIK rating	AIK score	PIK (%)	PIK rating	PIK score	KIK (%)	KIK rating	KIK score	Average of AIK & PIK score	PE in times	SIK (%)	SIK rating	SIK score	Average of AIK & PIK & SIK score
RTU/S	1	1	5	1	1	5	0	0	0	5,0	1,0	1	1	5	5,00
Average	0,06			0,11			0,04				1,8	0,05			

Table 6: The Comparison of the results of qualitative and quantitative evaluation of Latvian SI in the field of social sciences by form of IC for the period 2013-2018

SI	Quality score by TG (QTG)	Overall score by TG (OTG)	Total average score of AIK & PIK by IC form (TAAP)	Difference of score (QTG-TAAP)	Difference of score (OTG-TAAP)	Total average score of AIK & PIK & SIK by IC form (TAAPS)	Difference of score (QTG-TAAPS)	Difference of score (OTG-TAAPS)
SBF/S	2	2	1,7	0,3	0,3	1,4	0,6	0,6
RISEBA/S	2	2	2,6	-0,6	-0,6	2,0	0,0	0,0

SI	Quality score by TG (QTG)	Overall score by TG (OTG)	Total average score of AIK & PIK by IC form (TAAP)	Difference of score (QTG-TAAP)	Difference of score (OTG-TAAP)	Total average score of AIK & PIK & SIK by IC form (TAAPS)	Difference of score (QTG-TAAPS)	Difference of score (OTG-TAAPS)
ISMA/S	1	1	2,0	-1,0	-1,0	1,3	-0,3	-0,3
RAT/RS	3	3	3,7	-0,7	-0,7	3,5	-0,5	-0,5
RAT/BS	2	2	0,8	1,2	1,2	1,6	0,4	0,4
VU	3	3	1,7	1,3	1,3	1,6	1,4	1,4
BSC	4	3	0,5	3,5	2,5	0,2	3,8	2,8
RSU/S	2	3	2,6	-0,6	0,4	1,9	0,1	1,1
CSSR	1	2	0,5	0,5	1,5	1,3	-0,3	0,7
DU/S	3	3	2,2	0,8	0,8	2,6	0,4	0,4
LU/ES	2	2	1,6	0,4	0,4	1,8	0,2	0,2
RTU/S	3	3	4,3	-1,3	-1,3	4,2	-1,2	-1,2
UL/LT	3	3	3,1	-0,1	-0,1	2,9	0,1	0,1
LU/EE	1	2	1,0	0,0	1,0	2,1	-1,1	-0,1
UL/SS	3	3	1,7	1,3	1,3	1,5	1,5	1,5

Table 7: The Comparison of the results of qualitative and quantitative evaluation of Latvian SI in the field of social sciences by IC overall for the period 2013-2018

SI	Quality score by TG (QTG)	Overall score by TG (OTG)	Total average score of KIK by IC overall (TAKO)	Difference of score (QTG-TAKO)	Difference of score (OTG-TAKO)	Total average score of KIK & SIK by IC overall (TAKOS)	Difference of score (QTG--TAKOS)	Difference of score (OTG-TAKOS)
SBF/S	2	2	1,6	0,4	0,4	1,6	0,4	0,4
RISEBA/S	2	2	2,2	-0,2	-0,2	1,8	0,2	0,2
ISMA/S	1	1	2,0	-1,0	-1,0	0,0	1,0	1,00
RAT/RS	3	3	4,0	-1,0	-1,0	3,6	-0,6	-0,6
RAT/BS	2	2	0,4	1,6	1,6	1,4	0,6	0,6
VU	3	3	1,6	1,4	1,4	1,8	1,2	1,2
BSC	4	3	1,8	2,2	1,2	0,0	4,00	3,0
RSU/S	2	3	2,6	-0,6	0,4	2,0	0,0	1,0
CSSR	1	2	1,2	-0,2	0,8	1,8	-0,8	0,2

SI	Quality score by TG (QTG)	Overall score by TG (OTG)	Total average score of KIK by IC overall (TAKO)	Difference of score (QTG-TAKO)	Difference of score (OTG-TAKO)	Total average score of KIK & SIK by IC overall (TAKOS)	Difference of score (QTG-TAKOS)	Difference of score (OTG-TAKOS)
DU/S	3	3	2,0	1,0	1,0	3,0	0,0	0,0
LU/ES	2	2	1,4	0,6	0,6	1,8	0,2	0,2
RTU/S	3	3	4,2	-1,2	-1,2	4,2	-1,2	-1,2
UL/LT	3	3	3,0	0,0	0,0	2,8	0,2	0,2
LU/EE	1	2	1,0	0,0	1,0	2,4	-1,4	-0,4
UL/SS	3	3	1,6	1,4	1,4	1,4	1,6	1,6

From the results summarised in the tables 1; 2; 3; 4; 5, authors conclude that for all IC forms the average PIK indicators are the highest. They are followed average AIK, SIK and KIK indicators.

5. Conclusions

The study of the authors did not result in confirming hypothesis. When comparing the qualitative ratings of TG group to the quantitative assessments performed by the authors, it can be concluded that they differ from 2,8 to 5,4 points in total.

The study shows that the KIK, AIK, PIK, SIK, and PE of SI of SS in Latvia were higher as shown by the results compiled by the relevant Panel of the TG.

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