Roland Löffler Andreja Lenc Urška Slapšak

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APPLIED METHODS OF IMPACT ASSESSMENT

National report Slovenia TCA Showing and Identifying Impact of Erasmus+ on EU and National Level



I. Introduction

The Austrian Institute for Vocational Education and Research, on behalf of the OeAD as the Austrian National Agency for the Erasmus + programme, has scientifically supported the first project phase of the development of a method for measuring the effects of the programme (using the example of the key action KA1 in the field of vocational training) (TCA Showing and Identifying Impact of Erasmus + on EU and National Level).¹ This was done within the scope of the Transnational Cooperation Activity -TCA - Showing and Identifying Impact of Erasmus+ on EU and National Level² with nine participating countries; Austria, Estonia, Finland, Hungary, Iceland, the Netherlands, Norway, Slovenia and Sweden. This report shows the model results for Slovenia for the years 2014 to 2016. The model results are presented for the overall indicator and the sub-indicators. Furthermore the report also contains a comparative analysis in regard to selected socioeconomic criteria.

II. The Slovenian Education System with a View to Vocational Education and Training³

After the compulsory basic education of nine years comes the upper secondary education and is provided mainly by public schools. The Ministry of Education, Science and Sport is solely responsible for preparing legislation, financing and adopting programmes, standards and qualifications. While the education ministry deals with VET at systematic level, the Institute of the Republic of Slovenia for VET (CPI) is responsible at the practical level (monitors, guides the development of VET, provide in-service teacher training and vocational standards).

The upper-secondary education takes two to five years. Main objectives of the uppersecondary education in Slovenia aim to allow as many persons as possible to attain:

- general educational qualification and an occupation
- the highest level of creativity possible
- the highest possible level of educational qualification, and
- inclusion in the European integration processes, as well VET students can enrol in the following upper secondary, mainly school-based, programmes:

 ¹ For a description of model (concept, methodology, indicators, statistical testing) see: Löffler, Roland et al. (2018). Scientific Monitoring "Applied Methods of Impact Assessment Final report TCA Showing and Identifying Impact of Erasmus+ on EU and National Level, Part I. Wien: öibf.
² For a description of model (concept, methodology, indicators, statistical testing) see: Löffler, Roland et al. (2018). Scientific Monitoring "Applied Methods of Impact Assessment Final report TCA Showing and Identifying Impact of Erasmus+ on EU and National Level, Part I. Wien: öibf.

³ <u>http://www.cedefop.europa.eu/sl/publications-and-resources/publications/8070</u>, <u>http://www.cedefop.europa.eu/en/publications-and-resources/publications/4157</u>, https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016 CR SI.pdf)

- Technical programmes: four-year programmes that lead to a vocational matura (two general and two vocational – theoretical and practical – exams). In this programme students have from 4 to 12 weeks of practical training at a workplace. After passing vocational matura, students can enrol in higher post-secondary, nontertiary vocational education or in first sicle tertiary professional education. Graduates also have an opportunity to access most academic tertiary programmes if they pass one additional general matura exam.
- Vocational programmes: three years labour market-oriented programmes that lead to a final examination consisting of a practical assignment and Slovenian language exam. Programmes include at least 24 weeks of workplace training. After completion of the final examination students can enter the labour market or access two –year vocational technical education programmes that lead to vocational matura.
- Short VET programmes: two years programmes that include work-based learning that prepare and qualify learners for less demanding occupations. Alternatively, they can choose to continue their education in upper secondary VET programmes.

Private and public VET providers also offer higher VET programmes at post-secondary level, which include 40% of work-based learning in companies. Learners with vocational or general matura can enrol in these two-year programmes.

Slovenia is also taking the first steps in apprenticeship as a pilot implementation. The new Law on Apprenticeship was adopted in May 2017. In 2018, seven secondary vocational and technical schools were involved in apprenticeship.

Adult learning and CVET

Adults can enrol in the same formal VET programmes as young people. Organisation and means of assessing knowledge are adjusted to suit an adult learner (such as the use of modules and allowing exemptions). Adults can also participate in continuing VET, usually provided by private companies; regulation of provision of such programmes is not part of legislation. Many activities to support adult education are organised by adult education guidance centres and a network of independent learning centres. The national vocational qualifications (NVQ) system is intended for adults over 18 who would like to verify the knowledge gained outside formal education. The system has been in place since the year 2000.

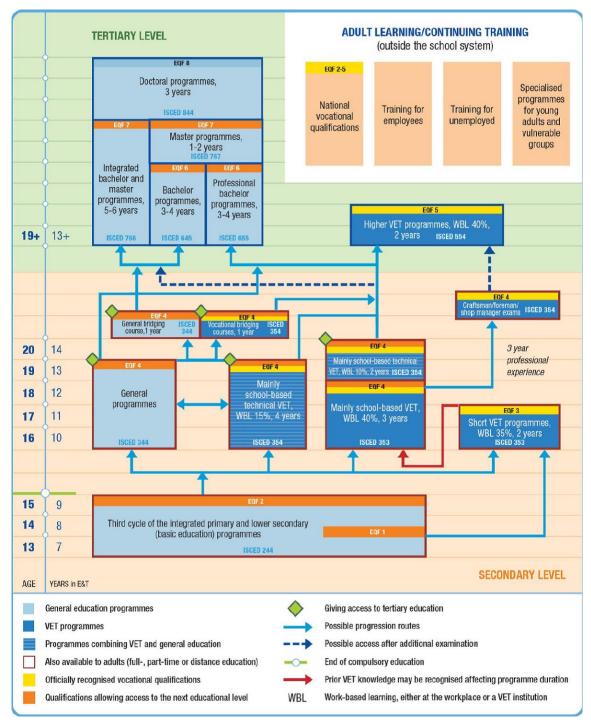


Figure 1: Slovenian Educational system

III. Erasmus+ Mobility in Vocational Education and Training in Slovenia

Erasmus+ mobilities in VET are extremely important in Slovenia, especially because there are no other (national or international) funds for international mobilities. Fortunately, EU funds are increasing every year, linear with the growth of interest for mobilities.

Since 2014, more than 7.500 people participated in Erasmus+ mobility in VET. Almost every VET school, at least once participated, either in Lifelong learning or in Erasmus+ programme.

The average duration for learners' mobility is 3 weeks, what is consistent with the duration of the practical training at the workplace in Slovenia. In 2018, the top three destination countries for student mobility were Finland, Germany and Spain. The 3 top fields of education for students' mobility are: agriculture, forestry, fisheries and veterinary (9%); engineering, manufacturing and construction (9%); information and communication technologies (9%). From the year to the year is increasing also the number of staff mobility. Average duration for staff mobility is 5 days and top three country destinations in 2018 were Finland, Spain and Great Britain. Until 2018, national agency awarded nine Slovenian vocational schools with the VET quality charter. They are important driver for internationalization and quality in VET. Slovenian national agency is coordinating also the ECVET expert group in Slovenia. ECVET in mobility projects is often used, mostly for facilitating the recognition of the learning outcomes. Almost 50 % of beneficiaries use at least one or two ECVET documents in their mobility projects and almost all mobilities are officially validated and recognized.

2014	2015	2016	2017	2018
2.048.154	2.414.911	2.536.753	3. 043. 967	3.561.853

EU funds per year (in EUR)

Numbers of mobilities, from 2014 - 2018

learners	apprentices	VET staff	Total
6484	0	1069	7553

	2014	2015	2016	2017	2018	Total
Number of projects (KA102 and KA116)	39	33	32	33	31	168
Number of learners	866	1232	1281	1422	1683	6484
Number of VET staff	307	143	181	234	204	1069
ErasmusPRO (more than 3 months)	N/A	N/A	N/A	N/A	13	13

IV. Results of the Impact Assessment Model⁴

I. How to use the results of the model

The objective of the TCA (and this report) is to identify and to show the impact of Erasmus+ on EU and national levels based on existing data. Of course, it is not possible to capture all the effects of the Erasmus + mobility programs at the level of individuals, participating educational institutions and at national and transnational level in a single model. Such activities can hardly be considered detached from other economic, systemic and cultural factors (such as the economic and labour market situation, the structure and governance of education systems, demographic and skills development at national and European level).

The model measures the impact based on participants' experience and feedback. The model results presented in this report are - although they are numerical values - not to be interpreted in their absolute values, but in their relative relations to each other. The overall indicator and the sub-indicators indicate the level of effects (at the personal level of the participants or the participating institutions) for the years of participation in the program examined. These indicators reflect participants' self-assessment of the issues raised and can be considered (due to high response rates) as a reliable measure of the individually perceived or expected effects of mobilities.

II. Main results

The results reflect the experience of about 3.800 respondents (3.300 learners, 500 staff). From the point of view of the participants the program has a positive impact (average score: 4.1 out of 5). The impact of mobilities on their own development and (in terms of participating staff) the development of the sending institutions is highly appreciated.

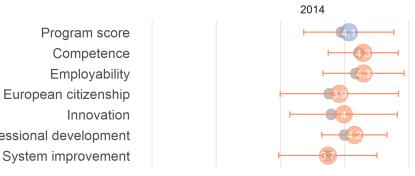
The effect is particularly high in the area of their own competences, and above all in the field of personal and social skills (Competence: 4.3; Employability: 4.2; Professional development: 4.2) and innovation (3.9). The results for Slovenia are above the average of the participating countries.

For a better understanding of the distribution of participants on socio-economic characteristics and the interpretation of the model results, the following points should be noted:

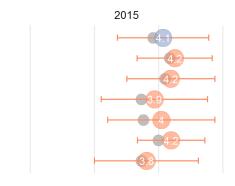
- In Slovenia young people usually start VET at the age of 16. The share of "younger" learners in mobility programs in Slovenia is significantly above the average of the participating countries.
- Both learners and teaching staff are predominantly female.
- In Slovenia, more than 60% of mobilities are in the category of *"middle duration"* and which is significantly above the average of the participating countries. This is both due to learners and staff.

⁴ For the methodology and the calculation of the scores see Annex.

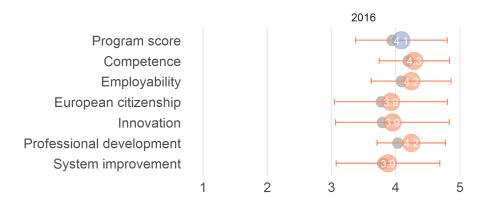
Slovenia - VET indicator scores Compared to European average



Professional development



Program score Competence Employability European citizenship Innovation Professional development System improvement

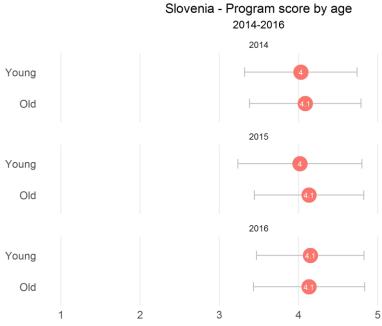


III. Socio-economic and Mobility Variables

Both female and male participants are very positive about the impact of mobility programs on their further development with females being a little more positive about the assessment of the impact. This applies to both learners and staff.

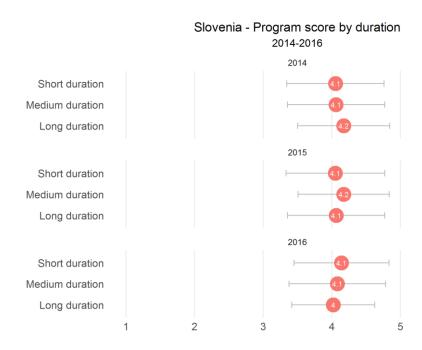


Both younger and older learners and staff alike benefit from participation in mobilities, older



Duration has only slight impact. The positive assessment of the effects of mobilities varies throughout the years.

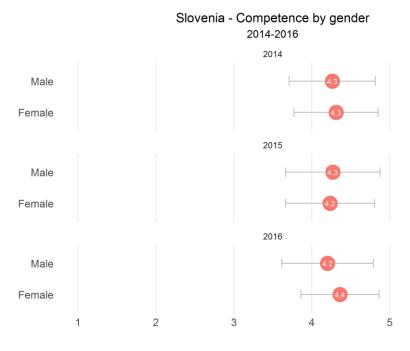
ones being slightly more positive about the impact. For both groups the score is slightly above the average of the participating countries.



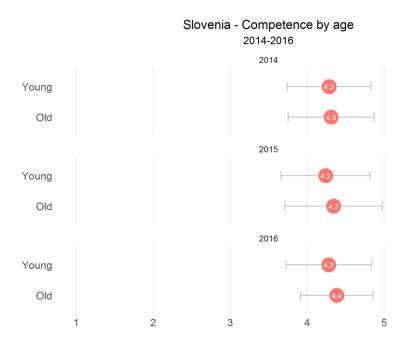
IV. Results for major thematic issues

I. Competence

Thanks to the mobility experience, learners are more open-minded and curious about new challenges, are more able to adapt to and act in new situations, and learned better how to cooperate in teams.



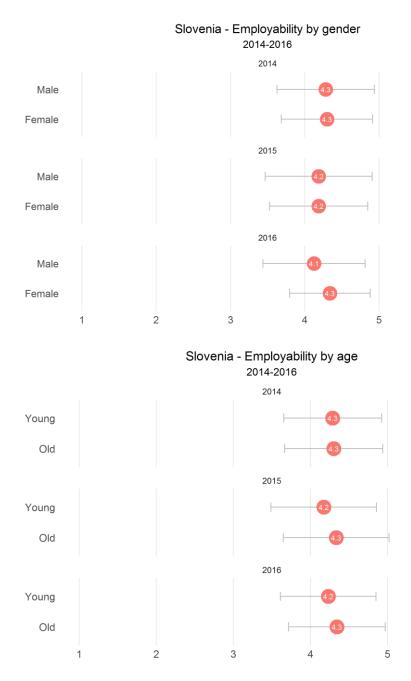
Female participants rate the effects of mobility on their competence development slightly higher than male. Coordinators of the projects often report that girls usually try to get as much as possible from the practice abroad what we could link with the higher awareness of potential benefits and maybe higher motivation. The impact on their set of competences is stated higher by older participants. This applies equally to professional, personal and social skills.



II. Employability

Thanks to the mobility experience learners believe that their chances to get a new or better job have increased and are better capable of taking over work tasks with high responsibility after their stay abroad.

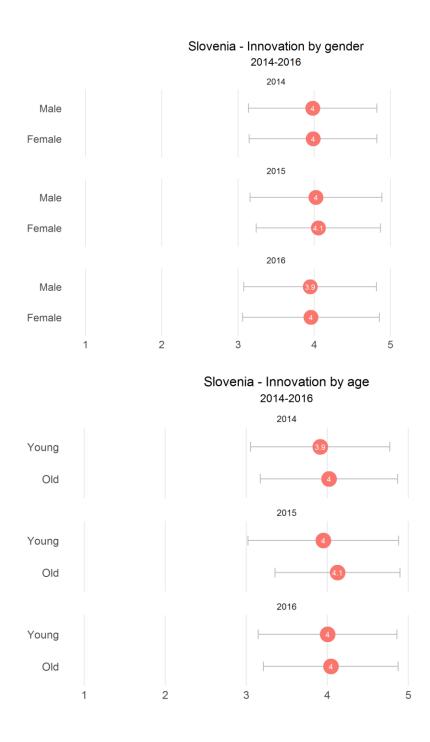
Both younger and older learners see a very positive impact on their employability. Female participants rate the effects of mobility on their employability slightly higher than male. One of the reasons might be that in the preparation phase, female better recognize and remember presented elements which can be gained on the mobility. During the mobility they focus better on this elements and are capable clearly present them to the employer. On average, longer mobility leads to a more positive assessment of the impact on employability.



III. Innovation

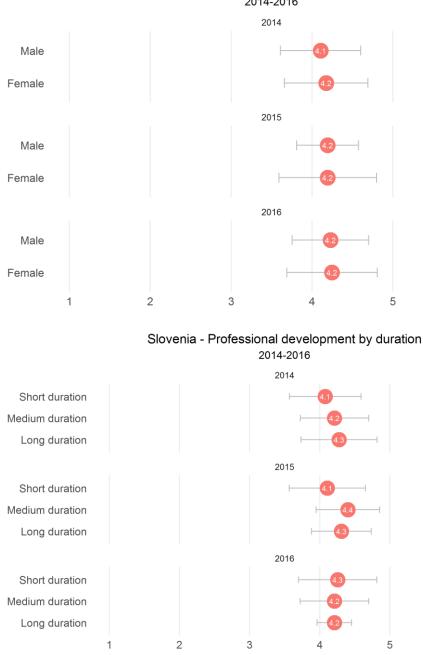
Through the participation learners learned better how to develop an idea and put it into practice.

For staff the participation in the program will lead to the use of new teaching/ training methods/approaches/good practices at their sending institution. This, however, is strongly connected both to the sending and the receiving institution. It depends – on the one hand – how open the sending institution is for introducing new methods or approaches and – on the other hand – how strong the position of the participant is within the sending organisation. Very often the position is strongly connected to gender and age.



IV. Professional Development

By participating in the Erasmus+ activity staff members have developed their cultural awareness and expression, their interpersonal and social competences, increased their social, linguistic and/or cultural competences and reinforced or extended their professional network or built up new contacts. Both male and female participants appreciate the mobilities in regard to their professional development.

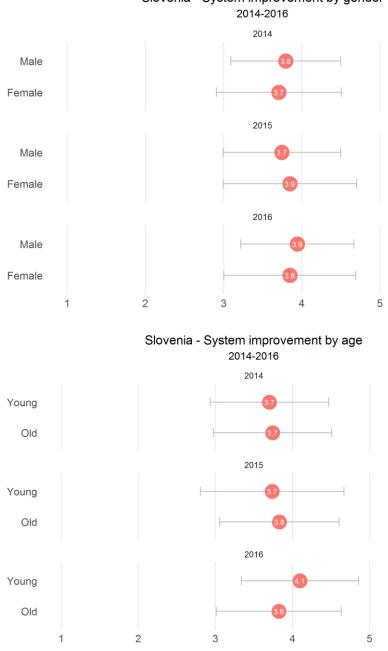


Slovenia - Professional development by gender 2014-2016

The impact on the professional development especially of teachers is a double one, both in regard to their personal competences and their career pathway in schools. Participants with longer duration think that the impact of the mobility on their professional development is even stronger.

V. System Improvement

Thanks to the mobility experience staff members have reinforced the cooperation with partner institutions/organisations and with players at the labour market.



Slovenia - System improvement by gender

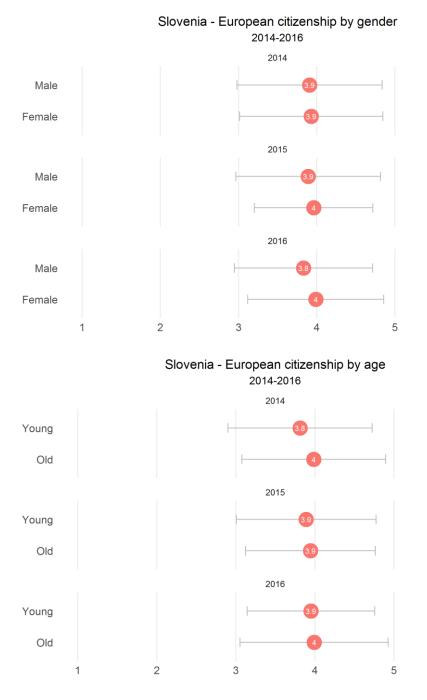
The impact on system improvement (like with innovation) is strongly connected to the sending institutions. Within the formal school system, systemic changes are hard to be introduced on a local level, because a great deal of framework conditions are set at national level or at the level of regional school administration and supervision. In assessing the impact of mobility on system development, older participants (except in 2016) give more positive assessments. The reason might lie in the positions of the staff in the sending institutions where they can more easily trigger systemic changes.

VI. European Citizenship and Internationalisation

After having taken part in the mobility activity learners are more interested in European topics, feel more European and are more aware of social and political concepts.

In regard to European citizenship - as with the other issues as well - one has to have in mind, that participants assess the impact of the mobility program on specific areas. So it's all about changing existing attitudes, knowledge and skills. For this reason, it is important to remember that the attitude of the participants prior to mobility is the starting point for the assessment. People with an initially very positive attitude to Europe may rate the effects of mobility less than those who were more Eurosceptic.

Staff participants think that their participation has led to an increase of internationalisation



in their sending institution.

Taking this into account, one has to point out, that especially older participants (both learners and staff) regard the impact of the mobility on the issue of European citizenship even higher than younger ones.

VII. Conclusions and recommendations

From the point of view of the participants, the Erasmus+ program has a positive impact.

The mobility program is regarded as very positive by the Slovenian participants, especially in the areas of **competence**, **employability** and **professional development**.

What are crucial factors in Erasmus+ mobility to obtain the highest impact?

1. Erasmus+ should be a tool to the implementation of the school strategy

International cooperation should be a part of the school culture. Erasmus+ projects are implemented in the school curricula (formal, informal, open curricula).

2. Preparation is crucial.

Results confirmed the importance of the preparation phase before mobility, both learners and staff. Institutions should focus, on one hand, on the participants, with a good selection procedure (transparent, relevant for the activity) and preparation (linguistic, cultural, professional), and, on the other hand good communication and trust with the project partners.

3. Reintegration after mobility and recognition of hidden competencies

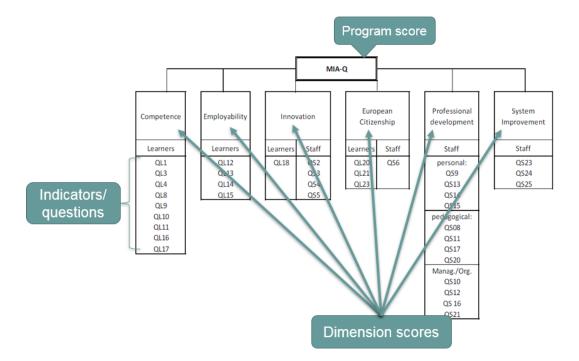
The institutions should provide the reintegration of the learners and staff after mobility and build on their acquired new competences for the benefit of the school, teaching staff and learners. They need to reflect on the hidden competences, knowledge and skills they gained during mobility and share with others. Institutions should focus and prepare learners to present their experience from the mobility to the future employer.

4. Principal's support for international projects

Significant role for the mobility impact and sustainability has a principal's support, especially for staff mobility. Principal should encourage, support and create a favourable attitude towards mobility projects.

5.Annex: Methodological explanations

I. The structure of the impact model



The impact model consists of six *dimensions*, each measured by a set of questions from the learners and/or staff datasets. For each dimension a *dimension score* is calculated. In addition, a composite *program score* is calculated from the six dimension scores.

II. Calculation of the scores

All survey questions used in the model has an identical 5-point response scale with values from 1 (strongly disagree) to 5 (strongly agree):

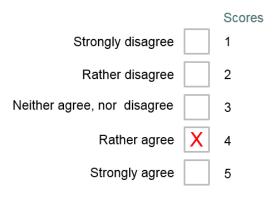


Figure 2: The 5-point response scale

All scores are based on the calculation of *unweighted means* across these scales. All scores will consequently have a value between 1 and 5 with 3 as a balancing point between positive and negative responses. The higher the score, the more positive are the respondents.

For all dimension scores based on data from only one of the two datasets (learners or staff), the scores are calculated in the following way:

- Step 1: For each respondent, the mean score across all relevant questions is calculated
- Step 2: The dimension score is calculated as the mean of all the respondents mean scores from step 1

For dimensions composed of data from both datasets (Innovation and European Citizenship), the mean score for each population (learners or staff) is calculated first following the two steps above. Then the dimension score is calculated as the unweighted mean of these two means. As a consequence, learners and staff have the same weight in the calculation of these dimension scores.

• Step 3: The program score is calculated as the unweighted mean of all the dimensions scores from the steps above.

This means that all six dimensions carry the same weight in the calculation of the program score.

 Step 4: All scores are firstly calculated per country and year as described above. The corresponding transnational scores are calculated as the unweighted mean of the national scores.

This means that all countries carry the same weight in the calculation of the transnational scores.

III. Breakdowns by background variables

All scores are broken down by a set of background variables. These are:

- Age
- Gender
- Duration of exchange

Please note that the cut-off-point between young and old is different for learners and staff

	Learners	Staff			
Young	< 19	< 35			
Old	>= 19	>= 35			

The same is true for the cut-off-points for the background variable duration:

	Learners	Staff			
Short	< 2 weeks	< 6 days			
Medium	2 - 4 weeks	6 – 10 days			
Long	> 4 weeks	> 10 days			

IV. Data Base

Table 1: Respondents to Participants' Survey KA1 VET 2014-2016

Learners	2014	2015	2016	Total	Learners	2014	2015	2016	Total
Total	901	1 201	1 157	3 259	Total	901	1 201	1 157	3 259
Female	465	720	630	1 815	Female	51,6%	60,0%	54,5%	55,7%
Male	436	481	527	1 444	Male	48,4%	40,0%	45,5%	44,3%
younger (< 19)	797	1 099	1061	2 957	younger (< 19)	88,5%	91,5%	91,7%	90,7%
older (>= 19)	104	102	96	302	older (>= 19)	11,5%	8,5%	8,3%	9,3%
short duration (< 2 weeks)	255	341	260	856	short duration (< 2 weeks)	28,3%	28,4%	22,5%	26,3%
middle duration (2 - 4 weeks)	578	854	856	2 288	middle duration (2 - 4 weeks)	64,2%	71,1%	74,0%	70,2%
long duration (> 4 weeks)	68	6	41	115	long duration (> 4 weeks)	7,5%	0,5%	3,5%	3,5%
Staff	2014	2015	2016	Total	Staff	2014	2015	2016	Total
Total	222	115	168	505	Total	222	115	168	505
Female	145	69	114	328	Female	65,3%	60,0%	67,9%	65,0%
Male	77	46	54	177	Male	34,7%	40,0%	32,1%	35,0%
younger (<35)	19	28	34	81	younger (<35)	8,6%	24,3%	20,2%	16,0%
older (>= 35)	203	87	134	424	older (>= 35)	91,4%	75,7%	79,8%	84,0%
short duration (< 6 days)	112	77	119	308	short duration (< 6 days)	50,5%	67,0%	70,8%	61,0%
middle duration (6 - 10 days)	84	25	43	152	middle duration (6 - 10 days)	37,8%	21,7%	25,6%	30,1%
long duration (> 10 days)	26	13	6	45	long duration (> 10 days)	11,7%	11,3%	3,6%	8,9%
All participants	2014	2015	2016	Total	All participants	2014	2015	2016	Total
Total	1 123	1 316	1 325	3 764	Total	1 123	1 316	1 325	3 764
Female	610	789	744	2 143	Female	54,3%	60,0%	56,2%	56,9%
Male	513	527	581	1 621	Male	45,7%	40,0%	43,8%	43,1%
younger	816	1 127	1 095	3 038	younger	72,7%	85,6%	82,6%	80,7%
older	307	189	230	726	older	27,3%	14,4%	17,4%	19,3%
short duration	367	418	379	1 164	short duration	32,7%	31,8%	28,6%	30,9%
middle duration	662	879	899	2 440	middle duration	58,9%	66,8%	67,8%	64,8%
long duration	94	19	47	160	long duration	8,4%	1,4%	3,5%	4,3%
All participants	2014	2015	2016	Total	All participants	2014	2015	2016	Total
Total	19 332	19 504	21 621	60 457	Total	19 332	19 504	21 621	60 457
Female	11 679	11 734	13 175	36 588	Female	60,4%	60,2%	60,9%	60,5%
Male	7 653	7 770	8 446	23 869	9 Male		39,8%	39,1%	39,5%
younger	9 311	10 046	11 054	30 411	younger	48,2%	51,5%	51,1%	50,3%
older	10 021	9 391	10 567	29 979	older	51,8%	48,1%	48,9%	49,6%
short duration	3 717	4 475	5 197	13 389	39 short duration		22,9%	24,0%	22,1%
middle duration	6 589	6 817	7 415	20 821	middle duration	34,1%	35,0%	34,3%	34,4%
long duration	9 388	8 145	9 096	26 629	long duration	48,6%	41,8%	42,1%	44,0%