

1 Article

2 Development and Implementation of Reasonable 3 Accommodation in Employment for Persons with 4 Chronic Health Issues: An Exploratory Study in 5 Slovenia

6 Aleksandra Tabaj ¹, Dare S. Kovačič ¹, Črtomir Bitenc ¹, and Valentina Brecelj ¹

7 ¹ University Rehabilitation Institute Republic of Slovenia; Development Centre for Vocational
8 Rehabilitation; aleksandra.tabaj@ir-rs.si; dare.kovacic@ir-rs.si; crtomir.bitenc@ir-rs.si;
9 valentina.breclj@ir-rs.si

10 * Correspondence: aleksandra.tabaj@ir-rs.si Tel.: +386 1-475-8-275, dare.kovacic@ir-rs.si Tel.: +386 1-475-8-
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12 **Abstract:** Employment implies economic independence, social inclusion, non-discrimination and
13 impacts people's life in areas beyond work. Therefore, for persons with disabilities (PwD), that
14 include persons with chronic diseases (PwCD), equal employment opportunities must be provided
15 and reasonable accommodation (RA) in employment carefully designed. The objectives of this study
16 done in Slovenia were: (i) to translate and adapt RA Factor Survey (RAFS; Dong et al., 2010); (ii) to
17 examine psychometric properties of its expanded Slovenian modification Aspects of RA survey
18 (ARAS); (iii) to find out the views of professionals in the field by ARAS; (iv) to present Slovenian
19 model of employment rehabilitation concerning PwD and PwCD. ARAS was developed with the
20 collaboration of professionals performing focus groups, it consists of three parts Influencing factors,
21 Contents areas and Barriers with 78 items. Data were collected from 140 professionals and
22 underwent descriptive statistics and factor analysis. The results showed that the key factors for RA
23 implementation are attitude and support of employer/organization. Other important factors are
24 employee and his/her employment, the conditions to implement RA, and the awareness of
25 employee and work environment. ARAS might be used as a framework to assist in the development,
26 improvement, and implementation of RA in practice. This is discussed in the broader context of
27 equal opportunities for employment of PwD including PwCD and the welfare model in Slovenia.

28 **Keywords:** reasonable accommodation; employment; vocational/employment rehabilitation;
29 persons with health issues; persons with disabilities; persons with chronic diseases
30

31 1. Introduction

32 The Preamble to the Convention on the Rights of Persons with Disabilities (CRPD) stresses that
33 "disability results from the interaction between persons with impairments and attitudinal and
34 environmental barriers that hinder their full and effective participation in society on an equal basis
35 with others" [1]. World Health Organization (WHO) [2] and the International Classification of
36 Functioning, Disability and Health (ICF) [3] start from the same conceptualization of functioning and
37 disability as a dynamic interaction between health conditions and contextual factors, both personal
38 and environmental. Disability itself is defined by the presence of a health condition issue in a
39 hindering environment and is a common issue in all societies. As Leonardi et al. [4] stated, this
40 biopsychosocial model - originating from holistic concepts of health and from Engel's seminal paper
41 on the need for a new medical model in 1977 [5] - represents a workable compromise between medical
42 and social models. Disability is the umbrella term for impairments, activity limitations and
43 participation restrictions, referring to the negative aspects of the interaction between an individual
44 (with a health condition issue) and that individual's contextual factors (environmental and personal

45 factors) [3, 4]. Adopting the definition of disability as an interaction means that it is not only an
46 attribute of the person, that changing other factors may change the extent of disability and that
47 improving social participation can be made by reducing or eliminating the barriers hindering PwD
48 in their day-to-day lives.

49 Apart from its toll in personal sphere disability brings numerous social/societal consequences.
50 Long-term health problems contribute to a greater risk of income poverty, social exclusion, severe
51 material deprivation, and lower work intensity [6]; furthermore, persons with longstanding health
52 problem face higher rates of unemployment and inactivity [7]. As the UN Commission for Social
53 Development stated, the position of PwD on the labour market worldwide is still not satisfactory.
54 Among factors, such as access to education, entrepreneurship possibilities, and non-discrimination,
55 which influence their opportunities on the labour market RA is one of most important [8]. In many
56 cases, exclusion from the labour market is more a consequence of barriers in the environment than
57 limitations connected with PwD/PwCD.

58 Furthermore, there is an increasing number of PwD/PwCD. In the WHO report on Disability [2]
59 (p. 29) it is estimated by two studies (the World Health Survey and the Global Burden of Disease),
60 that within the adult population PwD represent between 15.6% and 19.4% respectively, and between
61 2.2% and 3.8% experience a severe disability. It means that estimated number of people in the world
62 experiencing disability is staggering one billion and that up to 200 million have significant difficulties
63 in functioning. A large part of this population with disability suffers from non-communicable chronic
64 diseases (CD), such as diabetes, cardiovascular diseases (heart disease and stroke), mental and
65 neurological disorders, cancer, and respiratory illnesses, which altogether are estimated to account
66 for 66.5% of all years lived with disability in low-income and middle-income countries [2]. They also
67 accounted for 63% of 57 million deaths that occurred globally in 2008 [9]. European Disability
68 Strategy 2010-2020 estimates that “one in six people in the European Union has a disability that
69 ranges from mild to severe, making around 80 million who are often prevented from taking part fully
70 in society and the economy because of environmental and attitudinal barriers” [3] (p. 3).
71 Unfortunately, these rates of disability are increasing due to population aging and increases in
72 chronic health conditions.

73 In European countries there are different welfare systems in place to deal with this problem. The
74 EU funded Pathways project [10] compared strategies and legislation in several EU countries, finding
75 many differences. Mapping the policies, systems, and services facilitating inclusion of PwCD has
76 revealed that in some countries people from this group are considered to be a part of the group of
77 PwD [10]. In many cases, persons with chronic health problems are eligible for specialised support
78 in employment only if their condition is recognized as a “disability” or has a negative impact on their
79 work ability, depending on national and regional regulations [10]. As most of the EU countries,
80 Slovenia has a legislative framework against discrimination based on disability and provides support
81 to PwD only for those with a legal “disability status”. Anyway, PwD, including PwCD, belong to a
82 large vulnerable group in the open labour market. Since having chances to be employed and at work
83 represents a major part of social inclusion and non-discrimination impacting on people’s life also on
84 areas beyond work, their equal employment opportunities must be regulated and a reasonable
85 accommodation in employment carefully designed.

86 The term ‘reasonable accommodation’ (RA) in employment is now used more often than the
87 previous, similar, but more constricted term ‘workplace adaptation’ or ‘work adjustment’. The basic
88 European Union legislation for RA is the Directive on Equal Treatment in Employment and
89 Occupation [11]. RA is defined as appropriate measures by employers - where needed in a particular
90 case - to enable a person with a disability to have access to, participate in, or advance in employment,
91 or to undergo training, unless such measures would impose a disproportionate burden on the
92 employer. It encompasses job restructuring, part-time or modified work schedules, reassignment to
93 a vacant position, acquisition or modification of equipment or devices, appropriate adjustment or
94 modifications of examinations, training materials or policies, the provision of qualified readers or
95 interpreters, and other similar accommodations for individuals with disabilities. Typology of RA
96 includes several contents – from technical solutions, organizational arrangements, provisions of

97 assistance, qualification measures, and awareness-raising measures [12]. These strategies should
98 enable PwD the enjoyment or exercise on an equal basis with others of all human rights and
99 fundamental freedoms.

100 Several models of factors and components of the RA process have been proposed. Dong,
101 MacDonald-Wilson and Fabian [13] listed: willingness to request RA (Baldrige & Veiga, 2001),
102 workplace reactions to RA (Cleveland, Barnes-Farrell, & Ratz, 1997), co-worker fairness judgments
103 about RA (Colella, 2001), outcomes of RA such as satisfaction (Balser & Harris, 2008) and predictors
104 of receiving RA (Balser, 2007). Despite these, there was (and still is) a lack of a wider theoretical model
105 and an empirically supported list of factors related to the demand and provision of RAs in the
106 workplace. That is why Dong et al. [13] conceived a comprehensive theoretically and empirically
107 based list and survey questionnaire on RA, the "Reasonable Accommodation Factor Survey" (RAFS)
108 consisting of 52 items grouped into eight factors: Employer and organizational support, Employee
109 competence in RA, Employee demographic characteristics, Workplace impact, Workplace structure
110 and resources, Employee work record, RA characteristics and Nature of disabilities.

111 This paper focuses on the issue of more inclusive and healthy workplaces and especially on
112 factors of RA for PwD including PwCD. The objectives of the study are (1) to translate, adapt (also
113 expand, if needed) the RAFS [13]; (2) to examine its psychometric properties and after establishing
114 their adequacy form Slovenian modification, later named Aspects of RA Survey (ARAS); (3) to
115 explore the views of professionals (providers of vocational rehabilitation services from the
116 Employment Service of Slovenia and the Pension and Disability Insurance Institute of Slovenia) by
117 use of ARAS on factors influencing RA, contents areas of RA and barriers, and (4) to present the
118 context of the instrument's contents and professionals' views - Slovenian model of reintegration of
119 PwD and PwCD to work in the frame of welfare system. By constructing and applying ARAS on
120 large group of professionals we aimed to get enough empirically validated data to make a sound
121 structure and list all the key aspects of RA that can provide a framework to assist in the development
122 and implementation of RA for PwD in practice. This is discussed in the broader context of equal
123 opportunities for employment of PwD and PwCD and the situation in Europe, using Slovenia as a
124 case model.

125 2. Materials and Methods

126 2.1. Design and Procedure

127 This study is an observational and exploratory research using a mixed methods approach [14].
128 In line with the objectives, the first phase of the study used a qualitative focus group method; in the
129 second and third phase, a quantitative analysis of data collected within the survey was performed;
130 fourth phase consisted of description and discussion of Slovenian model of reintegration to work.

131 In a preparatory part of first phase the translation of the original USA study and survey
132 questionnaire RAFS to Slovenian language and back in English was carried out to check for accuracy.
133 The resulting Slovenian version was tested for consistency and comprehensibility within a small
134 sample of professionals. In the qualitative research phase we developed a working form of the survey
135 questionnaire, suitable for Slovenian setting, by means of four focus groups with 28 professionals.
136 After research objectives were explained to participants of the focus groups, they were asked to
137 provide feedback on the importance of each item of the questionnaire. The following questions
138 guided the discussion: (i) Is the specified question in the questionnaire important and appropriate
139 for RA of PwD in Slovenia? (ii) Is the translation appropriate? (iii) Do you think that we could delete
140 or add one or more items about specific Slovenian conditions? The duration of the discussions in the
141 focus groups was around 2 hours per group. In these discussions it became apparent that there are a
142 few new items and aspects to cover. Most of these new items formed two new parts of the preliminary
143 survey questionnaire, later titled Contents Areas of RA and Barriers to RA. After having reached a
144 sufficient agreement on contents and extent was reached, the final working form of survey
145 questionnaire was established.

146 In the quantitative second and third research phase all professional workers, working in
147 vocational/employment rehabilitation in Slovenia were encouraged to respond to the survey
148 questionnaire. Their responses to individual items on respective scales underwent descriptive and
149 analytical (factor analysis) statistics. After testing their psychometric properties and establishing their
150 adequacy, the obtained results were considered as valid indices of their views on RA.

151 2.2. Participants

152 Participants in the initial four focus groups were 28 professional workers (gender: 71,4% female
153 and 28,6% male; age: $M = 45,1$ years, $SD = 12,1$; working in the field: $M = 10,9$ years, $SD = 7,9$),
154 employed as service providers of vocational rehabilitation at Employment Service of Slovenia and at
155 Pension and Disability Insurance Institute of Slovenia. In the subsequent phase, the final version of
156 survey questionnaire was completed by 140 professionals (gender: 82% female and 18% male; age: M
157 $= 43,1$ years, $SD = 10,6$ years; working in the field: $M = 7,9$ years, $SD = 7,3$) in vocational rehabilitation
158 (providers of vocational rehabilitation at Employment Service of Slovenia and at Pension and
159 Disability Insurance Institute of Slovenia). The number of respondents represent 70% of all
160 professionals in the field in Slovenia. Most of them were psychologists (18,2%), social workers
161 (17,9%), occupational therapists (15,7%) and physicians (15%). It was intended to include PwD
162 (employees) and employers, but because of limited financial resources, only professional workers
163 participated.

164 2.3. Materials

165 The main instrument for data gathering was based on RAFS [13]. On the basis of review of
166 literature and suggestions from focus groups of professionals, the RAFS was adapted and expanded
167 from originally 52 to 78 items grouped in a tripartite survey questionnaire "Aspects of Reasonable
168 Accommodation Survey" (ARAS), containing parts: Factors influencing RA, Contents Areas of RA
169 and Barriers to RA parts.

170 The first part of ARAS on Factors influencing RA (modification of RAFS – RAFSm) was adopted
171 from RAFS [13]. Some of its items are: Benefits of providing accommodations, Communication
172 between the employee and employer, Employee's creativity in identifying accommodations,
173 Employer's attitudes toward employees with disabilities, Overall resources of the organization (e.g.
174 size, profitability), Type of accommodations requested etc. In three items mentioning American
175 Disability Act (ADA) it was changed to adequate Slovenian legislation act. After discussions in the
176 focus groups, three new items were added to original 52 RAFS items: Motivation of an employee,
177 Work environment personnel's acquaintance with RA and Broader social support and policy
178 (concerning the Ministry of Labour, Pension and Disability Insurance Institute and Disability Fund).
179 All items are presented in Appendix.

180 The second part of ARAS - Content Areas of RA (CRA) - was designed on the basis of the focus
181 groups' discussions about which contents do belong to the field of RA and which do not. Finally, 12
182 different areas of RA were identified: Education, Permanent professional support for employer,
183 Training and vocational/employment rehabilitation, Awareness raising for the work environment,
184 Permanent professional support for employee, Subvention of wage for employee, Training for RA
185 and education on novelties, Personal assistance, Architectural accessibility, Technological
186 accessibility and technical accessories, Sign language, Organizational adjustments: part-time work,
187 appropriate workplace.

188 The third part of ARAS - Barriers to RA (BRA) - consists of 11 items on possible barriers that
189 might represent bigger or smaller issues in the process of RA; these are: Duration of procedures,
190 Adequacy of procedures, Financial resources, Administrative burden for employers, Prejudices and
191 discrimination, Encouraging and informing on potential accommodation, Organizational culture,
192 Quickly accessible information, Reactions of employers, Information on stakeholders' procedures,
193 The motivation of PwD for work.

194 Responses to all items were made on 5-point Likert-type scales. Wordings of questions and
195 scales were: for RAFSm: How important were the items below in your decision to request or provide
196 a reasonable accommodation? 1 = not at all, doesn't belong, 2 = a little, 3 = medium, 4 = very, 5 =
197 most, essentially; for CRA: To what extent do areas in the list belong to reasonable accommodation?
198 1 = not at all, 2 = somewhat, 3 = medium, 4 = mainly, 5 = fully, completely; for BRA: To what extent
199 do factors in the list present difficulties and barriers in reasonable accommodation procedures? 1 =
200 not at all, 2 = somewhat, 3 = medium, 4 = considerably, a lot, 5 = extremely, completely.

201 2.4. Data Analysis

202 The data gathered from the survey questionnaires were analysed using Microsoft Excel and IBM
203 SPSS Statistics, version 20.0. The main part of data analysis were descriptive statistics – frequencies,
204 proportions, ranks – of ratings on scales used to present the views of professionals on different
205 aspects of RA. To test the construct validity and obtain empirical latent categories exploratory factor
206 analysis with principal axis factoring was applied. Argumentation for this statistical procedure is
207 provided in Discussion. Before this, basic preconditions, tested by Kaiser–Meyer–Olkin measure of
208 sampling adequacy (KMO_{msa}) and Bartlett's test of sphericity (B_{ts}), were fulfilled [15]. When factor
209 analysis revealed medium or high correlations between factors, showing their interdependency, we
210 used oblique rotation [16]. Finally, in order to test the internal consistency and reliability of key
211 factors, Cronbach's alpha coefficients were calculated.

212 3. Results

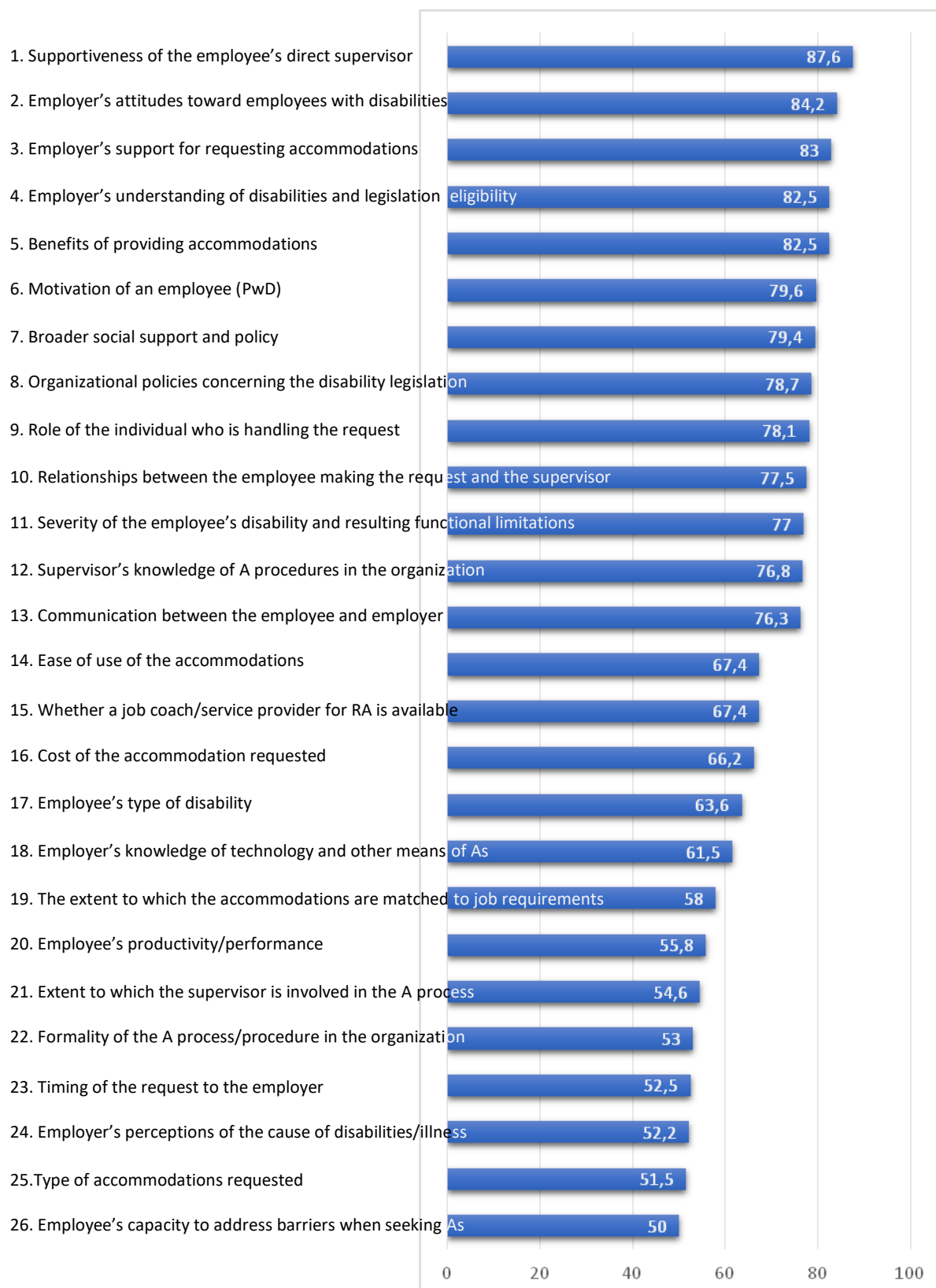
213 3.1. Adaptation and expansion of RAFS into ARAS

214 In the first qualitative research phase, a working form of comprehensive survey questionnaire,
215 adaptation and expansion of RAFS [13], suited to Slovenian setting, by assistance of four focus groups
216 with 28 professionals in the field was constructed. Discussions in focus groups resulted in three new
217 items in the first part of the questionnaire and two new parts of questionnaire. Aspects of Reasonable
218 Accommodation Survey (ARAS), as the whole tripartite instrument is named, contains: Factors
219 influencing RA (modification of RAFS or RAFSm, 52 original + 3 new = 55 items), Contents Areas of
220 RA (CRA, 12 items) and Barriers to RA (BRA, 11 items) with altogether 78 items (26 new) and
221 corresponding 5-point scales for assessment of their relevance. It is described also in section 2.3 on
222 Materials, while all items are presented in Appendix. In the subsequent phase the ARAS was
223 completed by 140 professionals and the obtained data were subjected to further quantitative analysis.

224 3.2. Factors influencing RA (RAFSm)

225 3.2.1. RAFSm Frequency distribution of responses to items

226 Frequency distributions of answers, i.e. ratings of item's relevance and importance from 1 – 'not
227 at all relevant' to 5 – 'essentially relevant' for 55 items on first part of ARAS RAFSm are most
228 informative. Items, ordered from highest 87,6% to 50% cumulative percentage of ratings 4 and 5
229 (Figure 1), i.e. from most frequently very/essentially important items reveal: First, items about
230 employer's role are on the first four positions from 87,6% to 82,5% of all responses and also ranking
231 on positions 9, 12, 18, 21, 24 which means that in the perspective of professionals employer's or
232 supervisor's attitude and supportiveness is essential for successful accommodation to work. Second,
233 though other groupings are not so obvious, employee's (PwD's) characteristics as motivation,
234 severity and type of disability, productivity, and capacity to address barriers (ranks 6, 11, 17, 20, 26
235 with 79,6% to 50% of all responses) together with items on relationship and communication between
236 employee and employer (ranks 11 and 13 with around 77% of all responses) are second in relevance.
237 Third, items on benefits, ease of use, cost, matching and type of accommodation (ranks 5, 14-16, 19,
238 25 with 82,5% to 51,5% of all responses) and items on immediate and broader environment (ranks 7,
239 8, 22 from 79,4% to 53%) form the third group regarding importance. Detailed results are in Figure 1.



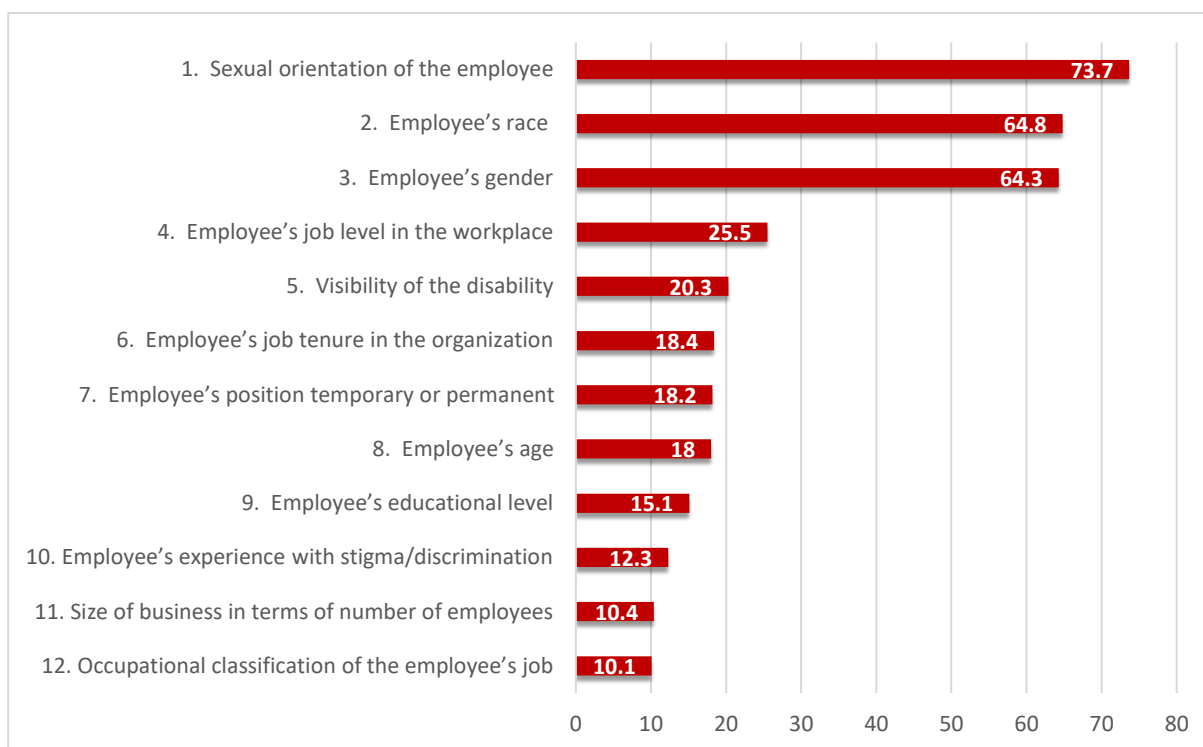
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241

242

Figure 1. RAfSm items most frequently rated as most/essentially (5) or very (4) important ordered by percentage of respondents (N = 140; A = accommodation)

243 On the other side is the rank order of items assessed as not at all important for RA. It is obvious
 244 that here employee has a special position, all first ten ranks are about some her/his characteristics.
 245 Three of them, sexual orientation, race and gender are especially not important considering 73,7% to
 246 64,3% agreement of respondents. Next five items with 25,5% to 18% of all responses have relatively
 247 high percentage, while altogether 12 items were rated by at least of 10% of respondents as not at all
 248 important, they are presented in the Table 1. Agreement on nonimportance of these features mean
 249 that professionals are aware and careful about equality of persons in their treatment. A matter of
 250 discussion is if this also means that first three items are not necessary.



251

252 **Figure 2.** RAFSm items most frequently rated as not at all important (1) ordered by percentage of
 253 respondents (N = 140)

254 3.2.2. RAFSm factor analysis

255 In the USA study, the researchers decided for an eight factors solution [13]: Employer and
 256 organizational support, Employee competence in RA, Employee demographic characteristics,
 257 Workplace impact, Workplace structure and resources, Employee work record, RA characteristics
 258 and Nature of disabilities. As some of them refer to the same stakeholder, we decided to set a smaller
 259 number of dominant factors. Community values [16] and Cattell's graph of eigenvalues (scree plot)
 260 [15] supported this decision and so a lower factors solution was chosen. Due to the fact, that the factor
 261 analysis revealed a medium-high correlation between first and third factor, which was also
 262 supported by factor transformation matrix, we decided to use oblique rotation for dependent factors
 263 [16]. Finally, a four factors solution was most adequate. Factors were interpreted as Employer and
 264 organizational support, Characteristics of employee and his employment, Implementation of
 265 reasonable accommodation, and Awareness of employee and work environment. Reliability, tested
 266 with Cronbach's alpha test, showed acceptable results with over 0,75 for all of them, the first and
 267 second factors' reliability being even higher than 0,90. Obtained factors, their constituent items,
 268 proportions of total variance and Cronbach's alphas are presented in Table 1.

269 The first factor comprises items referring mostly to the employer (Supervisor's knowledge of
 270 accommodation procedures in the organization, Employer's support, Employer's policy, and
 271 Technological knowledge of the employer etc.; altogether 19 items). The second factor encompassed

272 mainly characteristics of employee (Vocation, Education, Job level, Type of disability,
 273 Communication skills etc.; 16 items). The third factor included items linked to RA (Endurance of
 274 accommodation, Ease of use, Type of accommodations requested etc.; 9 items). The fourth factor was
 275 interpreted as Awareness of employee and work environment for recognition of RA (Capacity to
 276 address barriers when seeking accommodations, Knowledge of RA procedures in the organization,
 277 Feedback of co-workers, etc.; 8 items). Together they explain 44% of the variance. Factor loadings on
 278 three items (Employee's productivity/performance, Benefits of providing accommodations, Severity
 279 of the employee's disability and resulting functional limitations) were less than criterion value 0,40
 280 and were omitted from the Table 1. This means that professional workers don't associate them (or
 281 the association is very low) with the obtained factors. The factors are not completely clear, e.g. items
 282 Motivation of an employee and Employee's type of disability are part (albeit ranking low) of first
 283 factor Employer and organizational support, though primarily logically associated with an employee,
 284 but surely employee's motivation and nature of disability are among most important issues for an
 285 employer. Thirteen items were loaded (more than criterion 0,40) by two factors concurrently, one
 286 (Employee's communication skills in requesting accommodations) even on three. This reveals
 287 interactive nature of many procedures and characteristics in the process of RA, some of them
 288 (Relationship between employee and employer, Employee's communication skills, Employer's
 289 attitudes toward employee PwD) have inherently relational meaning.

290 **Table 1.** Factors, percentage of variance explained, Cronbach's alpha, constituent items and their
 291 factor loadings ($\geq 0,400$; three items loadings were less and are omitted from the table)

	Factor and constituent items	Factor loadings			
		% Variance explained / Cronbach's alpha		thousandth without decimals	
1	Employer and organization support 23,68 0,908	1	2	3	4
1	S's knowledge of A procedures in the organization	731			
2	Organizational policies concerning the disability legislation	712			
3	Er's support for requesting As	708			
4	Er's understanding of disabilities and legislation eligibility	681			
5	Supportiveness of the Ee's direct S	662			
6	Role of the individual who is handling the request (S, HR)	614			
7	Communication between the Ee and Er	613			
8	Relationships between the Ee making the request and the S	610		404	
9	Work environment personnel's acquaintance with RA	607			
10	Extent to which the S is involved in the A process	605			
11	Cost of the A requested	593			
12	Er's attitudes toward Ees with disabilities	589		496	
13	The extent to which the As are matched to job requirements	537		463	
14	Er's knowledge of technology and other means of As	534			
15	Broader social support and policy	527			
16	Formality of the A process/procedure in the organization	520			
17	Er's perceptions of the cause of disabilities/illness	491			
18	Motivation of an Ee	449			
19	Ee's type of disability	437			

2		Characteristics of employee and his employment				
		10,61 0,912				
20	1	Ee's job level (managerial/entry level) in the workplace		782		
21	2	Ee's educational level		747		
22	3	Ee's age		717		
23	4	Whether the Ee's position is temporary or permanent		695		
24	5	Occupational classification of the Ee's job		665		
25	6	Ee's job tenure (years) in the organization		643		
26	7	Size of business in terms of number of Ees		639		
27	8	Overall resources of the organization (e. g, size, profitability)	459	602		
28	9	Type of business		581		
29	10	Phase of the employment process when seeking As		581		
30	11	Ee's communication skills in requesting As	445	569		445
31	12	Visibility of the disability		549		
32	13	Ee's race		545		
33	14	Ee's gender		519		
34	15	Physical size of the workplace where the Ee is located	433	480		
35	16	Sexual orientation of the Ee		451		
3		Implementation of RA				
		5,35 0,859				
36	1	Scope and intensity of the A	427		790	
37	2	Duration of the A			751	
38	3	Perceived fairness of the A by co-workers			675	
39	4	Timing of the request to the Er	494		627	
40	5	Whether a job coach/service provider for RA is available			606	
42	6	Structural modifications necessary to provide As	456		575	
43	7	Ease of use of the As	417		564	
44	8	Type of As requested			551	
	9	Urgency of the A request	441		545	
4		Awareness of employee and work environment				
		4,60 0,751				
45	1	Ee's capacity to address barriers when seeking As				614
46	2	Ee's knowledge of RA procedures in the organization				544
47	3	Co-workers' reactions to As provided			476	530
48	4	Supportiveness of co-workers with regard to the request				493
49	5	Ee's experience with stigma or discrimination				474
50	6	Ee's creativity in identifying As				465
51	7	Ee's perception of the benefits and risks with RA				425
52	8	Ee's awareness and knowledge of the disability legislation and RAs				405

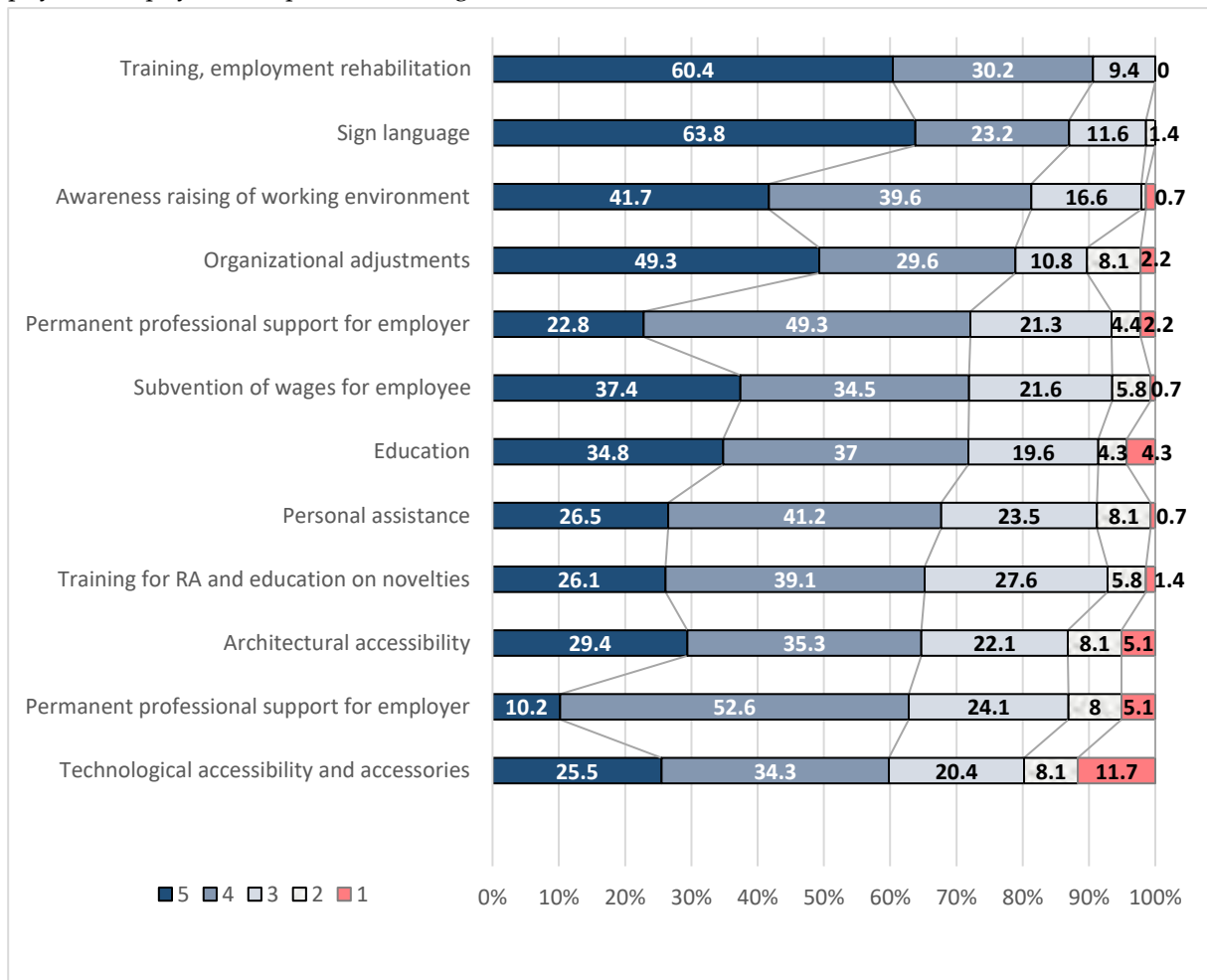
292 Factor loadings are presented as thousandth without decimal point. Some items are shortened and
 293 acronyms are used: A – accommodation, RA – reasonable accommodation, Ee – employee (PwD), Er
 294 – employer, S – supervisor.

295

296 3.3. Contents of reasonable accommodation (CRA)

297 3.3.1. CRA frequency distribution of responses to items

298 With the CRA ARAS questionnaire we tried to find out which (and to what extent) areas of
 299 subsystems and services are considered as a part of RA by professionals. All areas collected in the
 300 first phase of the study were assessed as an important part of RA (at least rating 3) by 80% of
 301 respondents. (see Figure 3). This was expected because they were assembled on the basis of
 302 importance for RA. More informative is their order and proportions of ratings. Four areas (Training
 303 and vocational/employment rehabilitation, Sign language, Awareness raising for the work
 304 environment, and Organizational adjustments: part-time work, appropriate workplace) were
 305 assessed as belonging completely or mainly (ratings 5 and 4) to RA by more than three quarters (75%)
 306 of professionals, and the rest seven areas were assessed as such by at least 60% of them (the eighth
 307 reached 59,8%). Generally Training and vocational/employment rehabilitation, was seen as the core
 308 part of the RA because it comprises many interventions, which are complex, individually PwD
 309 oriented and performed by different professionals such as psychologists, occupational therapists,
 310 physicians, physiotherapists, technologists.



311

312 **Figure 3.** Contents areas of RA (CRA) items and their percentage of ratings from belongs completely
 313 (5) to doesn't belong / not at all (1) ordered vertically by joint percentage of ratings 5 and 4 (N = 140)

314 Sign language, its teaching, learning, knowing and using was in 87% rated as, fully or partly
 315 belong to RA. Its high rank reflects the importance of the well-established means to fulfil the essential
 316 human need for communication that is blocked in PwD, who cannot talk or hear for different reasons.

317 3.3.2. CRA factor analysis

318 CRA data were also subjected to factor analysis in which considering contents and Cattell's
 319 graph of eigenvalues a two-factor solution was chosen and their reliability indices Cronbach's alphas
 320 were high enough (see Table 2). The first factor was interpreted as General environment solutions (or
 321 Joint supported environment solutions), the second was named Specific workplace accommodations,
 322 and together they explain 55% (42% and 13%) of the variance. Six items (Permanent professional
 323 support for the employer, Awareness raising for the work environment etc.) were loaded on both
 324 factors above criterion value ($\geq 0,40$) probably because both specific and general measures are needed
 325 for successful RA. Item Personal assistance has nearly equal loadings for the same reason: it is general
 326 systemic and specific, verbatim very personal; perhaps the fact that it is a current topic and also one
 327 of the latest acts in Slovenian legislation had its impact.

328 **Table 2.** Contents of RA (CRA) factors, their constituent items, percentage of variance explained by
 329 factor ($\geq 0,40$) and Cronbach's alphas

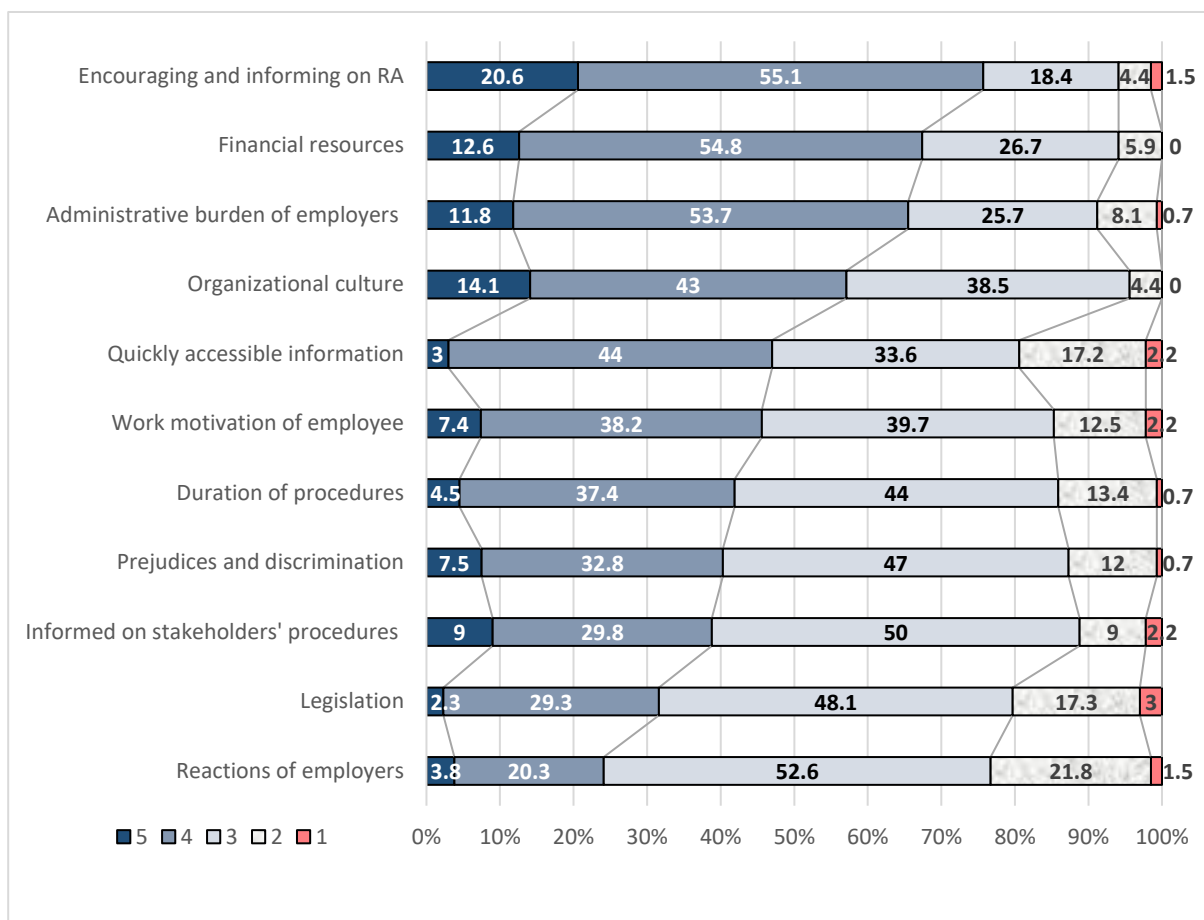
	Factor and constituent items	Factor loadings		% variance explained	Cronbach alpha
		1	2		
1	General environment solutions			42,09	0,858
	Permanent professional support for the employer	0,806	0,448		
	Awareness raising for the work environment	0,750	0,482		
	Training and vocational/employment rehabilitation	0,724	0,448		
	Education	0,713			
	Training for RA and education on novelties	0,686			
	Permanent professional support for the employee	0,533			
	Subvention of wage for the employee	0,526			
	Personal assistance	0,522	0,482		
2	Specific workplace accommodations			12,88	0,758
	Architectural accessibility	0,469	0,699		
	Technological accessibility and technical accessories		0,676		
	Sign language		0,663		
	Organizational adjustments: part-time work, appropriate workplace	0,480	0,645		

330 3.4. Barriers to reasonable accommodation (BRA)

331 3.4.1. BRA frequency distribution of responses to items

332 For more in-depth analysis on barriers and facilitations in the process of RA we used the third
 333 part of ARAS, BRA. Percentage of answers from completely (5), considerably (4), medium (3),
 334 somewhat (2) to no barrier at all (1) is shown in Figure 3.

335



336

337 **Figure 4** Barriers to RA (BRA) items and their percentage of ratings from complete barrier (5) to
 338 no barrier (1), ordered vertically by joint percentage of ratings 5 and 4 from the greatest to the least barrier
 339 (N = 140)

340 As shown in Figure 4, the main possible barriers are (insufficient) Encouraging and information
 341 on RA (75,7%), Financial resources (67,4%), Administrative burden for employers (65,5%) and
 342 Organizational culture (57,1%). Other barriers on the list are rated as complete and big barrier under
 343 50%. If we take into account also rating medium (3), all of the barriers are at least of medium
 344 importance for more than 75% of respondents.

345 3.4.2. BRA factor analysis

346 The KMO test and Bartlett's test of sphericity confirmed that factor analysis could be done.
 347 Testing of internal consistency, i.e. reliability, with Cronbach's alpha gave acceptable results. A two-
 348 factor solution, each factor with four items, was considered as most adequate (see Table 3). The first
 349 factor encompasses Systemic barriers (Duration of procedures, Financial resources, Legislation, and
 350 Administrative burden of employers), while the second factor contains Barriers to implementation in
 351 practice (Organizational culture, Reactions of employers, Encouraging and informing on potential
 352 accommodation, and Quickly accessible information). Together they explain nearly 50% of the
 353 variance. Three items (Work motivation of employee, Prejudices and discrimination, Information on
 354 stakeholders' procedures) were omitted because of their low loading. This doesn't mean that they
 355 cannot figure as significant barrier, percentages of professionals rating them complete or considerable
 356 barrier (ratings 4 and 5) were from 35,6% to 40,3%. They just didn't fit into obtained factors as other
 357 items, and similarly happened in the three-factor solution. Especially item Employee's work
 358 motivation stayed somehow floating, probably not because of nonimportance, but because one of the
 359 factors in previous selection of PwD for RA procedure was their (enough) high motivation.

360 **Table 3.** Barriers to RA (BRA) factors, their constituent items, percentage of variance explained by
 361 factor ($\geq 0,40$) and Cronbach's alphas

	Factor and constituent items	Factor loadings		% variance explained	Cronbach alpha
		1	2		
1	Systemic barriers to RA			38,05	0,724
	Duration of procedures	0,867			
	Financial resources	0,598			
	Legislation	0,574			
	Administrative burden of employers	0,479			
2	Barriers to implementation of RA in practice			11,52	0,796
	Organizational culture		0,853		
	Reactions of employers		0,655		
	Encouraging and informing on potential accommodation		0,525		
	Quickly accessible information		0,401		

362 4. Discussion

363 4.1. A tool and a survey - Aspects and factors of reasonable accommodation in the study

364 In order to get valid information on state of the art of RA in employment for PwD we needed a
 365 special, proven, valid and reliable tool. However, in Slovenia, as a relatively small country with two
 366 million inhabitants and native speakers, specific legislation and welfare system, there was no such a
 367 specific instrument on the market. We had to set out to form provisional and solid questionnaire,
 368 which was quite a challenge to develop. Finally, we decided to develop a survey questionnaire on
 369 the basis of USA instrument RAFS [13], made the translation, adaptation and expansion into tripartite
 370 survey questionnaire Aspects of reasonable accommodation (ARAS) and applied it as a survey
 371 instrument with a kind help of professionals in the field as respondents.

372 The first topic to discuss is validity, reliability and usefulness of ARAS. ARAS contains: Factors
 373 influencing RA (RAFSm, 55 (52 original + 3 new) items, 4 factors Employer and organizational
 374 support, Characteristics of employee and his employment, Implementation of RA, Awareness of
 375 employee and work environment), Contents Areas of RA (CRA, 12 new items, 2 factors General
 376 environment solutions, Specific workplace accommodations) and Barriers to RA (BRA, 11 new items,
 377 2 factors Systemic barriers to RA, Barriers to implementation of RA in practice) with altogether 78
 378 items (26 new). All factors had adequate reliability to do exploratory factor analysis which confirmed
 379 the basic constructs. We believe that since original RAFS and ARAS were carefully and expertly
 380 constructed on the basis of relevant literature, focus groups of professionals in the field, pilot testing
 381 of the instrument, contents and statistical analyses (factors, Cronbach's alpha), there are enough
 382 reasons for the conclusion that ARAS is valid and reliable. It is though still an instrument in
 383 development: it could probably be shorter, some items (e.g. those with very high 'not important'
 384 response) could be omitted, CRA items could be integrated with first part RAFSm, versions for PwD
 385 and employers could be formed, wording of items and questions more precise etc. However, as

386 already said, we think it provides a trustworthy and clear picture of the RA dimensions in Slovenian
387 settings.

388 There is a controversy regarding the use of factor analysis and other higher level parametric
389 statistic procedures in such cases because in the strict sense basic metric level of Likert-type scale is
390 ordinal. On the other hand, a considerable part of psychometricians allow use of parametric statistics
391 in certain cases (adequate sample size of subjects and items, nearly normal distribution), and some
392 experts (after simulated trials) conclude that parametric statistics tend to give “the right answer” even
393 when statistical assumptions—such as a normal distribution of data—are violated [17], and so
394 consider them as more robust than nonparametric statistics [17, 18]. Besides, many studies in
395 psychology, social sciences and medicine with such scales, (including our starting-point study [13])
396 applied parametric statistics, such as factor analysis or some other type of multivariate analysis, in
397 past decades. When a studied variable is described by a number of items experts suggest using the
398 Cronbach alpha or Kappa test or factor analysis technique to provide evidence that the components
399 of the scale are sufficiently intercorrelated and that the grouped items measure the underlying
400 variable [18]. Considering all this argumentation we used factor analysis (and other already cited
401 statistic procedures) in order to test construct validity and compare obtained factors to basic inferred
402 categories and to factors in the USA study [13].

403 Results of Slovenian survey confirm that conceptualising and implementing RA is a
404 multidimensional or multifactorial process with employer and organization (their attitude,
405 understanding and support) as the crucial factor for RA implementation - from the perspective of
406 professionals in the field. Of course, all other aspects and factors are necessary to be taken into
407 account: characteristics of an employee (including type and severity of disability) and his
408 employment, RA implementation possibilities, and awareness of employee and work environment.
409 Frequency distributions of responses to items show that items on the role of employer or supervisor
410 are most frequently (up to 87% of responses) rated as essentially or very relevant by the professionals
411 concerned. The importance of employee, features of accommodation and immediate and broader
412 environment is also evident in frequency and high ratings, but there is clearly a difference between
413 them and items on employer’s features. Factor analysis results indicate the same direction: among
414 four factors obtained the factor Employer and organizational support covers the highest percentage
415 of explained variance (nearly 24%), more than the other three together. So, this importance of
416 employer tells us how much special effort, intervention and goodwill is expected (but not always
417 formally regulated or prescribed) from this stakeholder, and finally, it also reveals power relations.
418 It is noteworthy that on the opposite side of relevance scale from essentially, most or very important
419 to not important all, the first ten ranked items are about employee (especially characteristics sexual
420 orientation, race and gender). This shows professionals’ principled care for PwD’s (i.e. employee or
421 candidate) equality but also her/his weak position in the situation when in need for help, support and
422 guidance on personal and social participation level. The study of practices of providing RA for PwD
423 in the workplace, consisting of 24 company case studies across Europe in 2008, yielded similar
424 findings: commitment of management, involvement of the staff, clear responsibility, adopted
425 regulations (for example work trials for PwD) are besides external factors (provision of
426 services/expertise, case assessment and consultation of experts, financial support, and flexible public
427 support) key to successful accommodation [12].

428 This basic social aspect may be a part of an important concept, the social capital. It is defined in
429 brief as cultural (norms, values, confidence) and structural (formal and informal human relations)
430 frames of social functioning [19] (p. 220) and is clearly present within the factors, for example in the
431 items: Support of employer for application, Communication between employer and employee, Views
432 of the employer towards employees, Recognition of equality between employees, Feedbacks of co-
433 workers etc. The whole fourth factor Awareness of employee and work environment and its items
434 can be identified as a social dimension and treated as a factor of social capital. We estimate that
435 around 18% (10 out of 55) of items in the first part of the ARAS and altogether 24% (19 out of all 78
436 items) can be recognized as social capital questions. These items are crucial for the dimension of
437 antidiscrimination and equality and form the basis for many procedures which are needed for RA.

438 As presented, the results of the USA study [13] are different from ours (see section 3.2 and Table
439 4 beneath). First, in our version three items were added as were also 12 CRA items and 11 BRA items.
440 BRA was formed to enable more in-depth analysis of frequent problem about barriers (and
441 facilitators) in the process of RA. Experiences in working with PwD showed that even though they
442 do have the right to RA, they anyhow stumble upon many different obstacles, which lead us to
443 include this aspect. Second, obtained factors somewhat differ in contents and definitely differ in
444 number (USA: 8; Slovenia: 4). Our position is, that smaller number of factors, which are merging a
445 higher number of variables (items) can more adequately explain the process of RA. Perhaps smaller
446 number of higher order factors in the original study [13] would reveal similar factor structure and
447 perhaps in practice 'creative' combinations could be useful. Third, the difference between these
448 studies is in the relationship of dependence between factors in Slovenian research, while USA
449 research found independent factors, perhaps also due to the previous point. Fourth, in their study a
450 principal component analysis was applied, while we used factor analysis (with principal axis
451 factoring and oblique rotation). There are some significant differences between both methods [15] (p.
452 638) - »...only factor analysis can estimate the underlying factors, and it relies on various assumptions
453 for these estimations to be accurate. The principal component analysis is concerned only with
454 establishing which linear components exist within the data and how a particular variable might
455 contribute to that component". So, besides obvious cultural, social and economic differences, the
456 choice of statistical analyses might also have its influence. Fifth, we present descriptive frequency
457 distributions with the percentage of each item ratings, which gives clearer and concrete information
458 on what aspects are really relevant. Finally, unfortunately in our study only professionals' responses
459 were collected; other stakeholders (employees (PwD) and employers) could not be included up to
460 now due to financial shortcomings.

461 The study reveals that RA request, planning and implementation is a dynamic,
462 multidimensional and multifactorial process. It depends on PwD or employee, employer,
463 organization and extended social and physical environment (including policies, subsystems and
464 services). It consists of important underlying constructs that showed up as factors in both, in our and
465 in the USA study. In Table 4 these three types of constructs, one theoretical and two empirical are
466 presented. They are in fact very similar, somewhere overlapping and more or less abstracted, while
467 individual items from studies are of course more concrete and perhaps clearer. It is important that all
468 of them are considered in practice and theory including research.

469

470 **Table 4.** Comparison between theoretical inferred categories, USA study factors, Slovenian study
 471 factors, (●--● link, in brackets number of constituent items)

Theoretical categories	Factors USA (Dong et al., 2010)	Factors Slovenia (this study)
Employee	Employee competence in RA (7)	Characteristics of employee and his employment (16)
Person with disability (PwD)	Employee demographic characteristics (4)	
	Employee work record (7)	
Employer Supervisor	Nature of disabilities (3)	Employer and organization support (19)
	Employer and organizational support (10)	
Interaction employer – employee – co-workers		
Environment	Workplace impact (9)	Awareness of employee and work environment (8).
Immediate workplace	Workplace structure and resources (6)	
Environment social organizational		
Reasonable accommodation (RA)	RA characteristics (6)	Implementation of RA (9)

472 Related to this line of discussion and deliberation is the wider use of results of the study. Though
 473 labelled as descriptive and observational, its results and particularly RAFS or ARAS were also
 474 intended to serve as a basis for a framework or a starting point in the practice of RA. The first function
 475 of ARAS was as an instrument for gathering information. Its second function arises from the
 476 conclusion that ARAS items and factors represent main aspects or categories of RA that must be taken

477 in to account in planning RA. So, ARAS can also be applied as a tool that helps to establish, organize,
478 implement, assess and improve RA.

479 There are of course several limitations of the study. First, ARAS is a preliminary form of the
480 survey questionnaire, with a comprehensive list of important items on the base of well-established
481 RAFS and professionals' suggestions and assessment. It has good content validity and internal
482 reliability (moderate to high Cronbach's alphas) and it can help us to get valuable information.
483 However, we do not consider it has a status of a perfect survey questionnaire, because the complete
484 construction procedure with replicated content adequacy assessment, complete item analysis (and
485 selection), criterion validation etc. was not performed yet. Thus, it is an instrument in development
486 and one of the next projects might be to develop a final version - though it would very probably differ
487 only in details. The second limitation is that only professionals in the field were respondents; other
488 stakeholders – employees (PwD and/or PwCD) and employers – were not included. Originally the
489 plan was to include them, but there were not enough financial resources to cover this part of our
490 research.

491 The strength of the study is a high number of professionals in the field participating in the first
492 phase (28) and especially in the second quantitative phase (140) which means that 14% and later even
493 70% of all experts in Slovenia collaborated in the project. This gives us confidence in the validity and
494 applicability of results. It is also one of the first studies of this kind in the area in Slovenia, and we
495 hope the research will be continued.

496 4.2. Equal opportunities of RA for PwD including PwCD – The Slovenian model

497 Several studies [20–22] emphasize the importance of RA or workplace adjustment for
498 employment of PwD or those with health problems. Our study results emphasise three key factors in
499 RA: employer, employee, and environment. What should be done to take into account these factors
500 in real life? The findings from Pathways project imply many suggestions for successful
501 implementation of RA: “better coordination between healthcare and employment should be in place
502 in order to ensure a better understanding of the relationship between work and chronic
503 diseases” [10] (p. 8); “employers need to be informed about specific health-related need of workers
504 in terms of work adjustment and overall inclusion in the labour force” [10] (p. 8); “Policies and
505 systems should focus on the greater involvement of employers” [1] (p. 10); “their cooperation is vital,
506 and there is a need for developing strong, innovative, and consistent strategies for ensuring their
507 commitment” [10] (p. 10); “health professionals should be trained to provide work-related advice to
508 PwCD to facilitate a quick return to work” [10] (p. 8). On the other hand, “lack of awareness was a
509 [major] barrier for the implementation of strategies targeting to assist and support employers and
510 create facilitative workplaces (e.g. the provision of RAs)” [23] (p. 66). In another part of Pathways
511 project focusing on recommendations targeting to create facilitative labour markets and/or
512 workplaces, the availability of RA, based on individual functioning, received the highest number of
513 “very important” responses from both groups of stakeholders, national and European [24].

514 In most European countries there are no legal frameworks explicitly covering the employment
515 integration of PwCD [10]. Therefore, in some countries they are largely covered by legislation for
516 PwD. EU Member States adopted different approaches in response to the requirement for RA –
517 differences occur among others regarding where in legal acts and how the provisions are stipulated
518 as well as the further specification of the terms reasonable accommodation and disproportionate
519 burden and the role of the public sector [12]. They are all offering grants or subsidies to employers to
520 provide RA, yet the mechanisms differs greatly across EU. Also, definitions and elaborations of RA
521 as well as of disproportionate burden on the employer are unclear, heterogeneous and difficult to
522 compare between the Member States. Despite the need for further research, economic analysis and
523 evaluation, evidence suggests that investments in RA are cost beneficial and provide a return in terms
524 of increased productivity and reduced absenteeism [25]. Since the number of persons with CD
525 (PwCDs) in Europe and worldwide is continuously growing, all the countries should move towards
526 developing solutions for this problem and ensure equal conditions and policy-level strategies for the
527 inclusion of PwCDs in employment.

528 In Slovenia, RA is available within vocational/employment rehabilitation on the basis of two
529 laws: Employment and Rehabilitation of Persons with Disabilities Act (ERPDA) and Pension and
530 Disability Insurance Act (PDIA) for persons employed or now unemployed (but were employed in
531 the past and were paying for pension and disability insurance) and claiming their rights on the basis
532 of their work. In the ERPDA assessment for RA is based on International Classification of
533 Functioning, Disability and Health (ICF) and International statistical classification of diseases and
534 related health problems (ICD). In the PDIA assessment is based on the ICD. Thus, ERPDA is larger,
535 based on biopsychosocial model, while PDIA is older, focussing on health issues and based on a
536 biomedical model. This means that by ERPDA formal status of PwD is obtainable for the persons (i)
537 with permanent consequences of physical impairment or mental disorder/disease, (ii) with activities
538 issues that impact person's employability, and (iii) who encounter barriers to participation in the
539 work environment. While by PDIA condition for PwD status is limited to health issues as
540 consequences of disease or injury that impede and disable person's work achievements as it were up
541 to that point.

542 Almost all different forms of RA – technical solutions, organizational arrangements (shortened
543 time of work, workplace adjustment and support, gradual return to work, psychosocial support etc.),
544 vocational rehabilitation, and awareness raising measures – can be used in accordance with both acts
545 except one: RA in the form of “job-coaching” (i.e. supported employment) and personal assistance is
546 not possible by PDIA, but by ERPDA. PwCD who are not formally recognized as PwD by ERPDA do
547 not have the right to job-coaching and personal assistance if they undergo PDIA procedures. As any
548 person with health issues, PwCDs can apply for the status of a PwD. To obtain a disability status they
549 must undergo a specific procedure and meet general criteria defined by the law. In the frame of
550 ERPDA they are rated on ICF generic qualifier scale (0-4, 0 - No problem, 1 - Mild problem, 2 -
551 Moderate problem, 3 - Severe problem, 4 - Complete problem) and those rated at least as having a
552 moderate problem are eligible. If they are rated accordingly, their rights and responsibilities are the
553 same as those of the PwD. In case they are not, they are not eligible for the benefits arising from the
554 disability legislation. Being recognized as “disabled” enables them to have protection from unfair
555 treatments, to have equal opportunities or to benefit from additional support in employment as well
556 as in other sectors. Considering all legal procedures, acts and criteria CDs are frequent diagnoses and
557 reasons for disability status in registers of Pension and Disability Institution.

558 Although Slovenian legislation is a good example of providing measures for RA in training and
559 employment for PwD, there are still barriers to providing this in practice. Participants in our survey
560 addressed barriers to RA as an important question to be taken into account for future. At focus
561 meetings professional workers confirmed frequently expressed criticism that legislation in Slovenia
562 is too complex, procedures are too complicated, with many administrative barriers in the process of
563 RA. Also, the question of recognizing different forms of RA should be promoted, as needs of PwD
564 (and PwCD) vary and every person should have the opportunity within RA to adapt the work
565 premises. So, “eligibility criteria for employment support need to be more flexible and not conditional
566 on disability certification” [10] (p. 142), and “support for financing workplace adjustments (including
567 removal of physical and non-physical barriers) should be available not only to persons with
568 disabilities but also to persons diagnosed with non-communicable diseases or chronic
569 diseases” [10] (p. 142).

570 What is positive and beneficial for PwD and PwCD who have acquired the status of disability,
571 is that the right for workplace adaptation is a legal right – legislative framework enables the rights of
572 PwD to equal work opportunities. The significance of RA is also highlighted on the European level.
573 Representatives of European organizations which have participated in Pathways survey have
574 stressed “the close cooperation among the EC, the EU Member States and their social partners, to
575 clarify patients' rights, highlight successful workplace adjustments and re-integration
576 actions” [23] (p. ix).

577 5. Conclusions

578 Main topics and contributions of this paper are (1) evaluation of reasonable accommodation for
579 PwD including PwCD in the employment sector; (2) adaptation and expanded modification of RAFS
580 [13] with three parts (Influencing factors – RAFSm, Contents areas of RA – CRA, Barriers to RA –
581 BRA) and 78 items, named Aspects of RA Survey (ARAS); (3) collection of the views of professionals
582 on factors influencing RA, contents areas of RA and barriers by use of ARAS, all shown as frequency
583 distributions and obtained factors from factor analysis; (4) use of Slovenia as a case model for defining
584 the context of the instrument's contents and professionals' views – Slovenian model of reintegration
585 of PwD and PwCD to work.

586 Factor analysis revealed four factors influencing RA, two factors or categories of 12 contents
587 areas and two factors or categories of 11 barriers that are characteristic of Slovenia as a case of
588 European continental welfare model. These, altogether eight factors are: (i) four RAFSm - Employer
589 and organization support, Characteristics of employee and his employment, Implementation of RA
590 and Awareness of employee and work environment; (ii) two of CRA - General environment solutions
591 and Specific accommodations for PwD; (iii) two of BRA - Systemic barriers to RA and Barriers to
592 implementation in practice. They represent eight (4+2+2) main aspects or categories of RA that should
593 be taken into account in establishing, organizing and implementing good quality RA for PwD
594 including PwCD. Their consistent use or use of upgraded ARAS (items, factors) as guidelines and
595 assessment could improve RA measures. In a convenient welfare system the crucial factor for RA
596 implementation is attitude and support of employer/organization, subsequent important factors are:
597 characteristics of an employee and his employment, RA implementation possibilities, and awareness
598 of employee and work environment. Or in a nutshell: three key factors in RA are employer (including
599 organization), employee (PwD), and environment (physical and social) and all of them must be
600 addressed. These conclusions are valid for Slovenian setting, but probably also elsewhere.

601 Slovenia can be used as a case model country to show how the adaptations for PwD look like in
602 the European continental welfare model countries (one of the five European welfare models), and
603 how the issue concerns all people with limitations in functioning, thus also people with chronic
604 conditions [1]. As most Continental EU countries it has the corporatist model: while having well-
605 developed integration policies, it still provides generous sickness and disability benefits, which
606 makes it more compensation policy-oriented. Slovenian model of enacting the concept of RA as a
607 measure for promoting employment of PwD can be seen as a good example of a state incentive. There
608 are still barriers to providing appropriate RA: legislation is too complex, procedures are long-
609 running, with many administrative burdens in the process of RA. Also, the question of recognizing
610 different forms of RA should be promoted, as needs of PwD (and PwCD) vary and every person
611 should have the opportunity within RA to adapt the work premises. Eligibility criteria for
612 employment support need to be more flexible and not conditional on disability certification. In the
613 long run, there is a hope for the general, though (due to the nature of the problem and in spite of its
614 name) not everywhere feasible solution: if the concepts of Universal Design and Design for All
615 prevail, many of the issues of RA in employment and also the basic issue of independence of PwD
616 will be reduced. For now, RA should be inclusive for all workers who – because of their health
617 condition - deteriorate in functioning as well as have additional barriers to overcome. It should be
618 available not only for persons with recognized and certified disability but for all persons, depending
619 on the level of functioning and not on diagnosis.

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626 and first draft of the manuscript; Valentina Breclj wrote draft sections on legislation aspects.

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628 What matters to persons with chronic conditions and disability regarding reasonable
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630 a case in point.

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691

692 **Appendix**

693

694

695 **Aspects of Reasonable Accommodation Survey (ARAS) questionnaire**

696

697 **I. Reasonable Accommodation Factor Survey modification (RAFSm = RAFS + 3 items)**

698

699 How important were the items below in your decision to request or provide a reasonable
 700 accommodation? (1 – 5)

701 1 = not at all, 2 = a little, 3 = medium, 4 = very, 5 = most, essentially

702

- 703 1. Benefits of providing accommodations
 704 2. Communication between the employee and employer
 705 3. Cost of the accommodation requested
 706 4. Co-workers' reactions to accommodations provided
 707 5. Duration of the accommodation
 708 6. Ease of use of the accommodations
 709
 710 7. Employee's age
 711 8. Employee's capacity to address barriers when seeking accommodations
 712 9. Employee's communication skills in requesting accommodations
 713 10. Employee's creativity in identifying accommodations
 714 11. Employee's educational level
 715 12. Employee's experience with stigma or discrimination
 716 13. Employee's gender
 717 14. Employee's job level (managerial/entry level) in the workplace
 718 15. Employee's job tenure (years of employment) in the organization
 719 16. Employee's awareness and knowledge of the disability legislation and RA
 720 17. Employee's knowledge of RA procedures in the organization
 721 18. Employee's perception of the benefits and risks associated with requesting RAs
 722 19. Employee's productivity/performance
 723 20. Employee's race
 724 21. Employee's type of disability

725

- 726 22. Employer's attitudes toward employees with disabilities
727 23. Employer's knowledge of technology and other means of accommodations
728 24. Employer's perceptions of the cause of disabilities/illness
729 25. Employer's support for requesting accommodations
730 26. Employer's understanding of disabilities and disability status eligibility
731 27. Extent to which the supervisor is involved in the accommodation process
732
733 28. Formality of the accommodation process/procedure in the organization
734 29. Occupational classification of the employee's job
735 30. Organizational policies concerning the disability legislation and workplace
736 accommodations
737 31. Overall resources of the organization (e.g., size, profitability)
738 32. Perceived fairness of the accommodation by co-workers
739 33. Phase of the employment process when seeking accommodations
740 34. Physical size of the workplace where the employee is located
741 35. Relationships between the employee making the request and the supervisor
742 36. Role of the individual who is handling the request (e.g. supervisor, HR manager,)
743 37. Scope and intensity of the accommodation
744 38. Severity of the employee's disability and resulting functional limitations
745 39. Sexual orientation of the employee
746 40. Size of business in terms of number of employees
747
748 41. Structural modifications necessary to provide accommodations
749 42. Supervisor's knowledge of accommodation procedures in the organization
750 43. Supportiveness of co-workers with regard to the request
751 44. Supportiveness of the employee's direct supervisor
752 45. The extent to which the accommodations are matched to job requirements
753 46. Timing of the request to the employer
754 47. Type of accommodations requested
755 48. Type of business
756 49. Urgency of the accommodation request
757 50. Visibility of the disability
758 51. Whether a job coach/service provider is available
759 52. Whether the employee's position is temporary or permanent
760
761 /additional items/
762 53. Motivation of an employee (person with disability)
763 54. Work environment personnel's acquaintance with RA
764 55. Broader social support and policy (concerning the Ministry of Labour, Pension and
765 Disability Insurance Institute and Disability Fund).
766
767

768 **II. Contents areas of Reasonable Accommodation (CRA)**

769

770 To what extent do areas in the list belong to reasonable accommodation?

771 1 = not at all, 2 = somewhat, 3 = medium, 4 = mainly, 5 = fully, completely

772

773

774 1. Education

775 2. Permanent professional support for the employer

776 3. Training and vocational/employment rehabilitation

777 4. Awareness raising for the work environment

778 5. Permanent professional support for the employee

779 6. Subvention of wage for the employee

780 7. Training for reasonable accommodation and education on novelties

781 8. Architectural accessibility

782 9. Technological accessibility and technical accessories

783 10. Sign language

784 11. Organizational adjustments: part-time work, appropriate workplace

785 12. Personal assistance

786

787

788 **III. Barriers to Reasonable Accommodation (BRA)**

789

790 To what extent do factors in the list present difficulties and barriers in reasonable
791 accommodation procedures?

792 1 = not at all, 2 = somewhat, 3 = medium, 4 = considerably, a lot, 5 = extremely, completely

793

794

795 1. Duration of procedures

796 2. Financial resources

797 3. Legislation

- 798 4. Administrative burden of employers
- 799 5. Organizational culture
- 800 6. Reactions of employers
- 801 7. Encouraging and informing on potential accommodation
- 802 8. Quickly accessible information
- 803 9. Work motivation of employee
- 804 10. Prejudices and discrimination
- 805 11. Information on stakeholders' procedures