1 2 3 4 5	ARTICLE IN PRESS, ARCHIVES OF PHYSICAL MEDICINE AND REHABILITIATION
6	Broadening the Conceptualization of 'Participation' of Persons with Physical Disabilities:
7	A Configurative Review and Recommendations
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42	Abstract
43 44	Within the context of physical disability, participation has typically been conceptualized
45	in terms of one's performance of different roles and activities. This perspective, however,
46	ignores the meanings and satisfactions that a person derives from participating. Without
47	an accepted conceptualization of participation that accounts for people's subjective
48	perceptions and experiences, it is challenging for decision-makers and service-providers
49	to design meaningful participation-enhancing services, programs, and policies.
50	Accordingly, our objectives were to: (a) conduct a review of definitions and
51	conceptualizations of participation that extend beyond performance and capture people's
52	subjective experiences of participating, and (b) identify key experiential aspects of
53	participation that can be used as a basis for conceptualizing and operationalizing the
54	concept more broadly. The project involved a systematic, configurative review of
55	relevant literature. Ten relevant articles were identified. Information on characteristics
56	associated with experiential aspects of participation was extracted and subjected to a
57	thematic analysis. Six themes emerged: Autonomy, Belongingness, Challenge,
58	Engagement, Mastery, and Meaning. Drawing on these findings, it is recommended that
59	the individual's subjective perceptions of autonomy, belongingness, challenge,
60	engagement, mastery and meaning associated with participating be incorporated into
61	conceptualizations and operationalizations of the participation construct. This
62	recommendation provides a starting point for clinicians, researchers and policy makers to
63	conceptualize and measure the participation concept more consistently and more broadly.
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65 *Keywords*: Social Participation; Social Engagement; Community Participation;

66 Community Involvement; Integration

67 68 69		List of Abbreviations
70	CINAHL	Cumulative Index to Nursing and Allied Health Literature
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72	ICF	International Classification of Functioning, Disability and Health
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74	SDT	Self-Determination Theory
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77	Introduction
78 79	Participation refers to the nature and extent of involvement in activities and roles
80	both at home and in the community ^{1,2} . Among persons with physical disabilities, greater
81	participation has been associated with better physical and psychological health and
82	greater overall life satisfaction ^{3,4} . Participation is considered so vital to human
83	functioning and well-being, that the United Nations ⁵ Convention on the Rights of Persons
84	with Disabilities protects the basic right to "full and effective participation" in society.
85	Given its importance, participation is considered a fundamental goal of
86	rehabilitation ⁶ , and is increasingly recognized by researchers as being part of a
87	comprehensive approach to health outcome assessment ⁷ . For example, among those who
88	have acquired a physical disability, return to participation in education, employment or
89	family roles are often primary long-term goals of a rehabilitation program ⁸ . In the
90	scientific literature, considerable research (e.g., ^{9,10}) has focused on the extent to which
91	children and adults with disabilities participate in social roles (e.g., student, parent,
92	spouse) and valued aspects of life (e.g., travel, sports, volunteerism). Research has also
93	focused on developing and testing interventions to increase the number of people with
94	disabilities who participate in various aspects of life and how much they participate (for
95	example, see reviews by Clayton et al. ¹¹ on employment interventions and Rimmer et
96	al. ¹² on exercise interventions).
97	Yet, as Dijkers ⁶ has noted, participation is more than the quantifiable extent to
98	which a person fulfills roles, has relationships and "otherwise performs a portfolio of

100 typically adopted by scientists, clinicians, and society in general, is to conceptualize

actions that can be witnessed by an observer" (p. S7). Nevertheless, the perspective

101	participation in terms of whether people are spending time involved in the typical range
102	of activities that would be expected, when compared to societal or cultural norms. For
103	instance, within the World Health Organization's International Classification of
104	Functioning, Disability and Health model (ICF; ¹³), participation is defined as
105	"involvement in a life situation" (p. 10) and operationalized in terms of the degree of
106	difficulty one has performing different roles and activities. However, conceptualizing
107	participation merely in terms of performance ignores the meanings and satisfactions that
108	an individual derives from participating 6,14,15 . Indeed, people with disabilities have
109	indicated that participation is not merely 'being there', and that full participation cannot
110	be defined simply as involvement in a particular set of activities or by predetermined
111	societal norms or standards ^{14,16} . Together, these perspectives create a compelling
112	argument for a conceptualization of participation that extends beyond what a person does,
113	and takes into account the person's subjective experiences of participating.
114	Currently, there is no commonly accepted conceptualization of participation that
115	accounts for people's subjective perceptions and experiences. As a result, it is
116	challenging for decision-makers and service-providers to design meaningful
117	participation-enhancing services, programs, and policies (cf. ^{17,18}). If the subjective
118	aspects of participation are not considered, strategies aimed at improving participation are
119	likely to achieve only an increase in the number of people participating rather than the
120	quality of people's participation experiences (^{18,19}). In addition, without a consistent
121	operationalization of the experiential aspects of participation, it is difficult for clinicians
122	and researchers to select appropriate outcome measures and to compare results across
123	studies, thus hindering the advancement of knowledge. Given these issues, the objectives

Overview of Methods

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of the present paper were to: (a) conduct a review of definitions and conceptualizations of participation that have been used within the physical disability literature to encompass experiential aspects of participation, and (b) identify key experiential aspects of participation that can be used to formulate recommendations for operationalizing the concept more broadly, beyond performance. Method A systematic, configurative review was undertaken. Configurative reviews are conducted with the goal of seeking, interpreting and arranging information, providing enlightenment through new ways of understanding, and developing concepts²⁰. Philosophically, such reviews are typically underpinned by assumptions of ontological relativism and epistemological constructionism.

136 Although configurative reviews tend to be more exploratory than aggregative 137 reviews (e.g., meta-analyses, cost-benefit analyses), they are still conducted in a 138 systematic manner with clear and accountable methods. The general methodology is 139 specified *a priori*, however specific methods may be selected or adapted iteratively as the research proceeds²⁰. This iterative process was necessary to address inherent challenges. 140 141 For instance, it was impossible to specify an *a priori* literature search strategy for our 142 project, as the search was for concepts and ideas rather than data. The search was further 143 complicated by the use of a variety of terms in the published literature to reflect similar 144 concepts, and discussion of the concept within different types of articles (e.g., reviews, 145 editorials, research reports).

The impact of these challenges was mitigated by following recommendations^{20,21} 146 147 employed by groups who have conducted similar types of reviews to operationalize concepts such as social exclusion²², social inclusion¹⁸, and institutionalization²³. These 148 149 recommendations included: adopting safe-guards to reduce biases (e.g., establishing 150 multidisciplinary teams); undertaking a broad search of relevant literature across multiple 151 sources and databases rather than conducting an exhaustive review; using an iterative 152 search strategy; and accepting overlap in the searching, analysis, synthesis and writing 153 stages of the project, because re-visiting each of these steps can help to focus the review. 154 A multidisciplinary core team (i.e., the authors) led the project. This team had 155 expertise in psychology, occupational therapy, disability and rehabilitation studies, and 156 population health. The project was undertaken as a preliminary step in a much larger, 157 federally-funded set of team-based projects designed to improve both objective and 158 subjective aspects of participation among people living with physical disabilities (the 159 Canadian Disability Participation Project; www.cdpp.ca).

160 Literature Search Strategy and Extraction of Relevant Information

161 A systematic, iterative, two-stage literature search was conducted, with the goal of 162 identifying a sufficient number of documents to facilitate the exploration of common 163 themes^{20,21}. In the first stage, we drew upon expertise within the core team to identify key

articles that addressed a concept consistent with the ideas of *full and effective*

165 *participation, qualitative aspects of participation, or subjective experiences of*

166 *participation*. The reference lists of these articles were reviewed to identify additional

167 relevant papers. The abstracts and (if necessary) full papers for these citations were read

to determine if the article provided a definition, key attributes, or any other information

169	that could be used to describe the concept. For articles that met these criteria, the
170	following information was extracted: type of article (e.g., editorial, review), terminology
171	used to label the concept, definition of the concept, and attributes or characteristics
172	associated with the concept.
173	This first literature search stage produced a clearer understanding of how the
174	concept was labeled, used, and discussed in the literature. Although there was
175	inconsistent terminology and labeling of the construct, it was routinely discussed within
176	the context of the need to think about participation beyond doing, or performing. It was
177	also noted that several of the articles reported on qualitative studies or were conceptual
178	papers that synthesized information and provided commentary.
179	With a better understanding of what to look for, MEDLINE, Embase, Cumulative
180	Index to Nursing and Allied Health (CINAHL), and PsycINFO databases were searched
181	for additional, relevant papers published between January 1990 and June 2015. The
182	following keywords were used: social participation OR community participation AND
183	physical disability. Search terms were kept broad given the lack of consistent
184	terminology used to describe the concept of interest. Publication language was not
185	restricted.
186	The searches returned 183 citations from MEDLINE, 114 citations from Embase,
187	272 citations from CINAHL, and 291 citations from PsycINFO. Using the knowledge
188	garnered from the phase one literature search, titles and abstracts were scanned to identify
189	articles that provided a definition, key attributes, or other information to describe a
190	conceptualization of participation that captured its subjective, qualitative, or experiential
191	aspects. Articles were excluded if they did not provide this information. There were no

192 other article inclusion/exclusion criteria. Particular attention was paid to abstracts that 193 described qualitative studies, commentaries, and knowledge syntheses, given the number 194 of articles of this type that were identified in the first phase of the search. 195 After removing duplicates, and scanning citation titles and abstracts, ten papers 196 were identified as potentially relevant. The full text of these articles was retrieved and 197 read. Eight papers were excluded for the following reasons: paper was a commentary on 198 another paper (n = 1); paper focused on a different concept ("the good life," general 199 disability issues, social care, barriers to participation [n = 4]; paper reported on an 200 evaluation of a specific program (n = 1) or a study of the relationship between 201 participation and other constructs (n = 1); paper discussed conceptual differences in 202 participation versus social participation (n = 1). Two articles were considered relevant 203 and included in the review. Additional papers were sought by searching the references of 204 these two papers and any subsequent articles in which they were cited. These strategies 205 did not yield any additional relevant papers.

206 Synthesis of Information

207 Information extracted on concept attributes or characteristics was subjected to an inductive thematic analysis²⁴. In brief, the individual attributes and characteristics were 208 209 coded and then sorted into themes by two members of the authorship team [XXX, XXX]. 210 All four authors then met to discuss and reach consensus regarding the coding, labeling, 211 and descriptions of the themes. The themes and a preliminary draft of this manuscript 212 were then circulated to academic and non-academic members of our larger team with a 213 request to provide feedback on whether the themes, along with their labels and 214 descriptions, were meaningful within each member's content area of expertise (e.g.,

215	program delivery, public policy, organizational behaviour). Team members were also
216	asked whether they believed the list of themes was comprehensive in its coverage of the
217	experiential aspects of participation. The authorship team deliberated this feedback and
218	subsequently used it to formulate recommendations for conceptualizing and
219	operationalizing participation.
220	Results
221	Description of the Included Papers
222	The first and second stages of the literature search yielded eight ^{6,14,25,26,27,28,16,4}
223	and two ^{29,30} papers, respectively, for a total of ten papers included in our review (see
224	Table 1). The papers included four editorials/reviews ^{6,25,28,4} , two focus group studies ^{14,29} ,
225	one mixed-methods measurement development paper ²⁶ , a concept analysis ²⁷ , a qualitative
226	meta-synthesis ¹⁶ , and a quantitative, observational study ³⁰ . All papers were published in
227	English.
228	Terminology and Definitions Used
229	Nine different terms were used in the literature to reflect the concept of interest:
230	1) the "qualitative/subjective/evaluative aspects of participation" ⁶ ; 2) "participation" ²⁵ ;
231	3) "full participation" ¹⁴ ; 4) "participation enfranchisement" ²⁶ ; 5) "engagement" ²⁸ ; 6)
232	"the subjective dimension of participation" ²⁹ ; 7) "levels of participation" ¹⁶ ; 8)
233	"meaningful participation" ⁴ ; and 9) "the subjective experience of involvement" ³⁰ . Only
234	four of the terms were defined ("participation enfranchisement", "engagement", "levels
235	of participation" and "the subjective experience of involvement"). The definitions are
236	presented in the second column of Table 1.
237	Thematic Analysis

237 Thematic Analysis

The third column of Table 1 shows the characteristics/attributes that were used to

- 239 describe or define each term. Using an inductive approach, two authors categorized the
- 240 individual characteristics into ten themes: Autonomy; Belongingness/Relatedness;
- 241 Challenge; Efficacy/Mastery; Engagement; Impact; Inclusion; Meaning; Opportunity
- 242 and Access; and Responsibility. Following deliberation and discussion with the core team
- 243 members, two themes--Responsibility and Impact--were subsequently subsumed under
- 244 Meaning, and Inclusion was incorporated within the theme of Belongingness/
- 245 Relatedness. The team also decided that Opportunity and Access were pre-requisites,
- rather than characteristics of participation; this category was subsequently removed,
- resulting in a set of six themes. The final set of themes, their labels, and a brief
- 248 description of each, is presented in Table 2.

249 Statement of Recommendation

- 250 The themes were circulated to the larger team for feedback from members outside
- 251 of the authorship group. Following a further round of discussions, the core team
- 252 formulated the following recommendation:
- 253 When conceptualizing and operationalizing participation, it is insufficient to
- consider only the objective, quantitative aspects of participation (e.g., level of
- 255 *performance, performance difficulty, number of people participating). The*
- 256 qualitative/subjective/experiential aspects of participation must also be taken into
- 257 account. These aspects include the individual's sense of autonomy, belongingness,
- 258 *challenge, engagement, mastery, and meaning associated with participating.*
- 259 This recommendation acknowledges that participation is more than what a person
- 260 does or how an outsider evaluates that person's performance. Participation also reflects

personal experiences, preferences, and perceptions. Implicit in this recommendation is the assumption that what constitutes *participation* for one person may be different for another. Moreover, different aspects of participation (e.g., experiencing a sense of autonomy, challenge, meaning, etc.) will be important to different people, at different times and in different situations, given that individuals often have unique and multiple motives for participating.

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Discussion

268 The purpose of this project was to synthesize efforts to conceptualize 269 *participation* beyond level of performance. Using a configurative review process, 270 information was extracted from ten relevant articles and categorized into six themes 271 representing experiential aspects of participation: Autonomy, Belongingness, Challenge, 272 *Engagement, Mastery, and Meaning.* The themes were then used as the basis for 273 formulating a recommendation that can be used by researchers, clinicians and policy 274 makers as a basis for conceptualizing and operationalizing participation more broadly. 275 Within the reviewed papers, concept labels ranged from general descriptors (e.g., "the subjective dimension of participation,"²⁹) to specific terms (e.g., "participation 276 enfranchisement,"²⁶). Yet despite terminological variability, in every article, the authors 277 278 emphasized the importance of taking into account people's participation-related 279 experiences and perceptions. While we recognize that there is no clear consensus in the 280 literature for the use of any particular term, our group has elected to retain the World Health Organization's¹³ term *participation* while expanding its conceptualization to 281 282 include not just objective, quantitative indicators of performance, but also the six themes 283 of qualitative, experiential aspects of participation, identified in our review.

284	The six themes represent experiential aspects of participation that should be taken
285	into account when conceptualizing and operationalizing the participation construct.
286	Importantly, the themes were apparent across different types of articles (e.g., editorials,
287	research reports) and across studies that used different research methods (e.g., focus
288	groups, observational studies). For instance, in their concept analysis of children's
289	participation, Hoogsteen and Woodgate ²⁷ highlighted the importance of control,
290	engagement, meaning, and inclusion. Similarly, in a focus group study, Hammel and
291	colleagues ¹⁴ asked people with disabilities "what does it mean to fully participate in
292	life?" Responses clustered into themes that included choice and control, meaningful
293	engagement, and social connections. The consistency in identified features of
294	participation across articles provides evidence to support the robustness of our
295	conclusions with regard to the construct's key experiential aspects.
296	Importantly, the six themes also align with theoretical conceptualizations of
297	factors that contribute to well-being (e.g., self-determination theory ^{31,32} ; theory of
298	purposeful work behavior ³³ ; flow and peak experiences ³⁴). For example, according to
299	Self-Determination Theory (SDT), humans must experience ongoing satisfaction of three
300	basic needsautonomy, competence and relatednessin order to experience optimal
301	development and functioning ^{31,32} . Paralleling this theoretical tenet, participation is known
302	to be vital to human functioning and well-being ¹³ and three of the themes identified in
303	our reviewAutonomy, Mastery and Belongingnessencompass the three basic
304	psychological needs specified in SDT. Likewise, within the occupational therapy
305	literature, Moll and colleagues ³⁵ recently proposed a framework delineating the links
306	between occupation, health, and well-being, which incorporates eight types of everyday

307	activities related to health and well-being, (e.g., connecting with others, taking care of
308	yourself), and five fundamental characteristics of activities that shape optimal health and
309	well-being. Three of these characteristicscontrol/choice, engagement, meaningare
310	reflected in the themes identified in our review (i.e., Autonomy, Engagement, and
311	Meaning). Thus, our findings regarding key experiential aspects of participation are
312	consistent with both well-established theoretical perspectives on factors that contribute to
313	well-being in general ^{31,32} , and emerging perspectives on factors that contribute to well-
314	being in occupational contexts in particular ³⁵ .

315 The development of an expanded conceptualization of participation has important 316 implications for scientists, clinicians and policy makers. By delineating its subjective/ 317 experiential aspects, a clearer distinction can now be made between participation and 318 related concepts such as inclusion and community integration. Inclusion, for instance, has 319 traditionally been defined in terms of objective levels of participation or as the mere presence of people with disabilities in societal settings and contexts¹⁸. Likewise, although 320 321 some researchers have operationalized community integration as encompassing feelings of belongingness and sense of community³⁶, in most studies, objective indicators of 322 323 participation have typically been at the core of community integration measures³⁷. 324 Considering participation in terms of the six thematic elements distinguishes it from these 325 other concepts.

The delineation of key experiential aspects of participation will also facilitate its operationalization and the selection of appropriate measures for its assessment. In previously published systematic reviews of participation measures for people with disabilities, authors distinguished between instruments that assess actual participation,

and instruments that assess the subjective experience of participation^{38,39}. A sampling of the latter is presented in Table 3 to illustrate how items or subscales/dimensions from these instruments align with some of the themes identified in our review. This illustration is, however, based solely on an assessment of the face validity of the instruments and their items. Additional research is needed to determine whether the instruments and items do indeed measure the experiential aspects captured by the themes (i.e., research to assess construct validity).

337 When measuring the experiential aspects of participation in a particular context 338 (e.g., workplace, recreation, family roles), we encourage researchers and clinicians to 339 consider using measures that are not necessarily rehabilitation or disability-specific. 340 Other disciplines have well-established measures of people's subjective experiences of 341 participation in specific domains and contexts. For instance, in workplace settings, the Basic Need Satisfaction at Work Scale⁴⁰⁻⁴² might be used to assess feelings of autonomy, 342 343 belongingness and mastery; work-related engagement and meaning could be captured by 344 sets of items formulated for testing hypotheses regarding the relationship between these 345 constructs in the workplace⁴³; challenge could be measured by the task complexity, skill variety, and problem solving components of the Job Characteristics Framework⁴⁴. These 346 347 measures of experiential aspects of participation could be combined with measures that 348 capture more traditional, objective aspects of participation such as the Participation 349 Objective, Participation Subjective which includes an item to measure the time spent on paid work⁴⁵, or the ICF¹³ which assesses the difficulty one has engaging in paid and 350 351 unpaid employment. In addition, because standardized questionnaires are unlikely to fully 352 capture the broad range of potential participation experiences, we recommend the use of

qualitative methods to capture how people experience participation in different contexts
and how their experiences unfold over time. Combinations of assessments such as these
should provide a more comprehensive and meaningful perspective on participation than
any one methodology on its own.

357 **Project Limitations**

There are four main limitations of this review. First, given the ontological and epistemological assumptions inherent to configurative reviews²⁰, other reviewers could come to different conclusions regarding the content and labeling of the themes. However, given the involvement of a multidisciplinary team, and the resulting themes aligned with empirical perspectives on participation¹⁴ and broader theoretical perspectives on wellbeing^{31,35,32}, we believe that our conclusions are robust.

364 A second limitation is that our conclusions are based on the extant literature, and 365 no relevant articles were found outside of the rehabilitation sciences. There may be other 366 themes and disciplinary perspectives that are relevant to a broadened conceptualization of 367 participation but are absent from the literature. Indeed, psychology experts within our 368 team raised concern that positive emotions or affective states (e.g., enjoyment) were not 369 explicitly mentioned among the key experiential elements of participation. While 370 affective and emotional states could be captured under Engagement (e.g., experiencing 371 positive affect while participating may be a characteristic of engagement) or *Meaning* 372 (e.g., people may find meaning in activities that produce satisfaction or pleasure), the 373 absence of discussion in the literature regarding affect and emotion highlights the need 374 for continued work to identify and test the conceptual underpinnings of participation. In

375	addition, an important future direction will be to distinguish experiential aspects of
376	participation from psychosocial antecedents and consequences of participation.
377	Third, an exhaustive review of participation measures was beyond the scope of
378	this project (see [^{38 39}] for systematic reviews of participation measures). Although a
379	comprehensive analysis of subjective measures of participation may have provided
380	further support for the six themes, we are reluctant to draw conclusions about the validity
381	of the themes based on how participation has been previously measured. The
382	conceptualization of participation should dictate its measurement rather than
383	measurement dictating how participation is conceptualized. Furthermore, when
384	conducting the analysis presented in Table 3, we recognized a strong potential for bias in
385	linking measures with themes. That is, the original intent or meaning of the scales and
386	items could be quite different from our interpretations. Notwithstanding these issues,
387	there would be merit in compiling a catalogue of subjective measures of participation for
388	people with disabilities, as some of the instruments may have utility for operationalizing
389	the participation construct.

And finally, a fourth limitation is that we restricted our review to literature that addressed participation among people with physical disabilities. For people with other types of disabilities (e.g., sensory, intellectual), it is possible that different, or additional types of experiences are relevant to the conceptualization of participation.

394 Conclusions

395 Despite some limitations, our synthesis has created a starting point to begin
396 operationalizing and measuring the participation concept more broadly and consistently.
397 We have formulated a recommendation to capture six experiential aspects of participation

- 398 that extend beyond mere performance: Autonomy, Belongingness, Challenge,
- 399 Engagement, Mastery, and Meaning. We encourage researchers, clinicians and policy
- 400 makers to adopt this recommendation when addressing questions regarding participation
- 401 among people with physical disabilities.

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Table 1.

Terminology, Definitions and Core Features of Concepts Reflecting the Experiential Aspects of Participation

Reference, Description	Terminology, Definition	Attributes/Characteristics
Dijkers, 2010 ⁶	Qualitative/subjective/	Autonomy
	evaluative aspects of participation	Challenge, mastery
Editorial/Introduction to special issue on		 Closeness, affection, social support given and received, emotional attachment
participation		• Desire more/less/same/different; fit with ideal self
		• Difficulty, restriction, limitation, problemness
		• (Dis)agreement, unity
		Importance, value, meaning
		• Influence
		Opportunity and access
		Productivity
		Respect and dignity
		Responsibility
		Satisfaction
		• Self-efficacy, sense of competence
		Sense of belonging/membership/acceptance
K. W. Hammel	Full Participation	Choice and control
et al., 2008^{14}		Meaningful engagement
Focus group study		Personal and social responsibilities
rocus group study		Having an impact
		Social connections
		Societal access and opportunity

J. Hammel, 2015 ²⁵	Participation	Autonomy
Review article		 A sense of competence and accomplishment A sense of belonging, acceptance, safety, respect Ability and opportunity 'to do'; to engage in personally meaningful/valuable activities Ability and opportunity to contribute to well-being of others Ability and opportunity to support and do things for others Engagement in meaningful and reciprocal relationships Having social connections
Heinemann et al., 2011 ²⁶ Mixed-methods measurement development studies	Participation Enfranchisement: " a set of perceptions and values that give meaning to participation and that apply across domains"; "belongingness to one's community or society" (p. 565)	 Social engagement and inclusion Choice and control Contributing to one's community Feeling valued by others
Hjelle & Vik, 2011 ²⁹ Focus group study	The subjective dimension of participation	 Being engaged (in one's own and others' lives) Being a member of society (being equal, valued included, having freedom to choose) Interacting as a citizen

Hoogsteen & Woodgate, 2010 ²⁷ Concept analysis	Participation in children with disabilities	 The child must take part in something or with someone feel included or have a sense of inclusion; while participating, children must feel like they are engaged by either doing or being have a choice or control over what they are taking part in; hold a degree of autonomy and take part in what matters to them work toward obtaining a personal or socially-meaningful goal or enhancing quality of life
Imms & Granlund, 2014 ²⁸ Editorial	Engagement: "involvement in the task while there" (p. 291)	"The fully engaged individual will experience a level of acceptance of, and by, others and is the ultimate in participation outcomes." (p. 291)
Kramer et al., 2012 ¹⁶ Qualitative meta- synthesis	Levels of participation: "the extent to which they [youth with disabilities] felt meaningfully engaged and authentically included" (p. 771)	 Four levels of participation on a continuum from more to less inclusive participation: Doing what everyone else is doing Fringe participation Waiting or watching Doing something different
Law, 2002 ⁴ Keynote address/review	Meaningful participation	 Clear goals Quick and accurate feedback Must be a feeling of choice or control over activity A supportive environment A focus on the task A sense of challenge from the task A sense of mastery May experience sense of 'flow'

Maxwell et al., 2012 ³⁰ Observational study	The subjective experience of involvement: "the subjective experience of involvement can be represented by the psychological constructs of involvement, control, motivation, and attention as experienced in the here-and-now moment" (p. 276)	 Control Motivation Concentration Involvement
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Table 2.

Results of the Thematic Analysis of Attributes/Characteristics Used to Describe

Experiential Aspects of Participation

Themes	Brief Description
Autonomy	Having independence, choice, control
Belongingness	Experiencing a sense of belonging to a group; acceptance/respect from others; included at interpersonal or societal levels
Challenge	Feeling appropriately challenged
Engagement	Engaged in the activity; motivated; focused, involved; experiencing 'flow'
Mastery	Experiencing achievement/competence/ sense of accomplishment; self-efficacy
Meaning	Contributing toward obtaining a personal or socially-meaningful goal; feeling a sense of responsibility to others

Table 3.

Examples of Instruments to Assess Subjective Aspects of Participation and their Potential Thematic Alignment

Instrument	Relevant Subscale/Dimension or *Question	Aligned Theme
Impact on Participation and	Autonomy Indoors	Autonomy
Autonomy Questionnaire ⁴⁶	Autonomy Outdoors	Autonomy
	Social Relations	Belongingness
Reintegration to Normal Living	*"I feel that I can deal with life events as they happen"	Mastery
Index ⁴⁷	*"In general, I am comfortable with my personal relationships"	Belongingness
Social Role Participation	Role Importance	Meaning
Questionnaire ⁴⁸	Satisfaction with Role Performance	Mastery
Participation Objective, Participation Subjective ⁴⁵	*"What is the importance of [the activity] to your well-being?"	Meaning
Participation Enfranchisement	Choice and Control	Autonomy
Measure (19-item version) ²⁶	Contributing to One's Community	Meaning
· · ·	Feeling Valued	Belongingness
Participation Enfranchisement	Importance of Participation	Meaning
Measure (48-item version) ⁴⁹	Control over Participation	Autonomy