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The quality of experience of students with and without special educational needs in everyday life and when relating to peers

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ABSTRACT

The aim of this paper is to investigate the quality of experience of students with and without SEN in everyday life in general and when relating to peers in particular: (1) How do they experience everyday school life vs. leisure time? (2) How much time per week do they spend with peers outside school? and (3) How do they experience those peer contacts? The data comprised 120 grade 8 (20%) and grade 9 (80%) students from the German-speaking part of Switzerland, with a mean age of 15.8 years ($SD = 0.8$ years). Of these students, 42 were diagnosed with SEN, of which 32 were taught in regular classes and 10 in special classes. Students were asked to report their current affective states on about 31 randomly selected occasions during one week, with a total of 3758 'snapshots' of their activities and their emotional experience in everyday life. Data were collected using the experience sampling method. Momentary affective states were measured by the PANA short-scales. The findings show, first, that students with and without SEN from regular classes interact as often with peers during leisure time, while students with SEN from special classes are presumably more likely to interact with family. Second, adolescents experience leisure activities more positively than instruction. Third, social interactions generally have a positive effect on the quality of experience. The quality of experience is especially good for teenagers when they are with peers – best with peers during leisure time. There are no differences between the student groups.

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A central, if not the main, goal of inclusive education is to support participation of all students in common activities. Students diagnosed with special needs get specific attention since they are commonly more often at risk to be socially less integrated as their peers (e.g. Koster, Pijl, Nakken, and van Houten 2010). This not only concerns social participation in school contexts, but also later in society at large. Regular classes in general education strive for the long-term goal of social participation through exemplary action. Participation in school contexts is thus understood as both a means and an end (cf. Imms et al. 2017).

Social participation not only concerns educational contexts, but also extracurricular activities and different aspects of everyday life. In early teenage years, get-togethers with peers become more important (Rubin, Bukowski, and Parker 2006). Participation of teenagers in everyday situations is seen in their leisure activities as well as in contacts with peers in the neighbourhood. This is not only about the quantity of common activities or contacts, but also about their quality. In other words, apart from the frequency of participation or attendance, the extent of involvement is important for experiencing participation in everyday activities. An important indicator of this is the quality of emotional experience.

The goal of this paper is thus to examine social participation in everyday activities of students with special education needs. Specific attention is paid to the subjective quality of experience during activities with peers.

Participation in everyday life

The concept of participation in everyday life and common activities in regular fields is already found in the well-known normalisation principle, which was advanced in the 1970s as a guiding principle (for an overview see, Flynn and Lemay 1999). Originally the term was coined to understand and question life conditions of people with intellectual disabilities. Bengt Nirje, the most well-known co-founder, describes its features as follows:

The normalization principle means making available to all persons with disabilities or other handicaps, patterns of life and conditions of everyday living which are as close as possible to or indeed *the same* as the regular circumstances and ways of life of society. (Nirje 1985, 67)

In the second of eight elements of the normalisation principle, the possibility for activities in a 'normal' weekly rhythm is postulated. The importance of leisure activities outside institutions and homes i.e. in regular societal settings is underlined, since this is where social learning and orientation as well as the opportunities for social relationships can take place. Through activities in regular or common settings, realistic experiences are facilitated, which then support personal development (Nirje 1969).

According to Wolf Wolfensberger, the greater goal of the normalisation principle is the establishment, support and protection of 'valued social roles for people who are at risk of social devaluation' (Wolfensberger 2011, 435). Normalisation is thus demanded for all people, under the risk of social discrimination or degradation and not only for those labelled with 'intellectual disability'. A two-pronged strategy is considered expedient since both individual and contextual or cultural differences are taken into account. On the one hand, societal perceptions and values considering the devalued person or social group are to be changed, so that they are no longer seen as devalued. On the other hand, competencies of the person concerned are to be improved. Possible implications are, e.g. the proximity to other sites, challenging environment, enhancing group composition as well as enhancing social participation (cf. Wolfensberger 2011, 438). These are implications, which concern children and teenagers in educational settings as well as extracurricular contexts.

Social participation in the context of regular secondary education

Most of the studies on social participation of children and teenagers with special education needs so far focused on participation in school contexts, mainly primary education. Only

gradually, while inclusive settings become more common, does the lower secondary level get more attention (Bossaert et al. 2015).

The passage from primary to secondary is well-known as an area of concern since teenagers are challenged considerably by inherent changes (Humphrey and Ainscow 2006). In the transition, one's academic reference group and environment is exchanged for another. Furthermore, on the secondary level, relative ability and social norms weigh more than on the primary level and students are expected to study increasingly autonomously (Carter et al. 2008). At the same time, the passage coincides with early adolescence, which is a time of less positive emotional states and relative instability (Larson et al. 2002). Additionally, vertical relationships with adult caregivers are exchanged for horizontal relationships as social interaction with peers and peer affiliation become more important (Hartup 1989). Lastly, peers play an important role when it comes to academic motivation (Ladd, Herald-Brown, and Kochel 2009).

In a hierarchically differentiating academic system such as in Switzerland, students with special educational needs (SEN) are particularly at potential risk in the transition from primary to secondary level. During allocation to different educational tracks, among others, there is an increased probability of being assigned to a school type with lower requirements or to a separative school type (e.g. classes with a special curriculum). The consequences for further education and professional career are usually far-reaching (Felkendorff and Lischer 2005). However, the type of school also has a more direct effect on various aspects of social participation. But, the findings are inconsistent because of different operationalisations and the often-missing control groups. With regard to the social position, students with SEN generally seem to be 'worse off' compared to their classmates in regular school classes (review of Ruijs and Peetsma 2009). According to a meta-analysis by Oh-Young and Filler (2015), more inclusive settings with regard to effects on social skill outcomes of students with disabilities are generally superior to the less inclusive or rather separative settings.

The different conceptual uses led Koster and colleagues (2009) to a systematic clarification in a literature analysis of studies on the social dimension of inclusion in elementary or primary regular education. The authors identified four key themes of social participation: friendship/relationship, interactions/contacts, perceptions of students with SEN and acceptance by classmates.

For secondary regular education, the findings are basically similar to those for primary regular education (cf. Schwab 2015). According to a literature review by Bossaert et al. (2013) – along the four key themes of Koster and colleagues – students with SEN often have less social contacts with their peers, are less popular and are more often rejected than their classmates. At the secondary level, the problem seems to exacerbate compared to the primary level (Pijl, Frostad, and Flem 2008). Furthermore, students with SEN generally have a lower social self-concept (Pijl, Skaalvik, and Skaalvik 2010) and somewhat lower self-perceptions of social inclusion (Schwab et al. 2015).

In studies so far, the focus was on social participation within the school. According to the current state of research, everyday activities in peer-context do not seem to have been considered as a comparison.

Measurement of quality of participation

In the study of participation in everyday life, the quantity of participation is often targeted in the sense of attendance, but (much) less the quality in the sense of involvement (Granlund 2013). According to a review by Imms and colleagues (2016), involvement contains the sub-topics affect, motivation and social connection. The subjective view is, therefore, usually required for the assessment of involvement. Along with the change from adult to peer-focused relationships, valid self-reporting tools are prerequisite, with which the various activities in different social contexts can be collected (Raghavendra 2013). The expression of an adolescent's emotional experience corresponds to the involvement in the respective activity during a specific situation and thus also provides information on the subjective quality of social contacts.

As self-reporting tools, conventional questionnaires are usually used. But there is only a small selection of questionnaires for the study of social participation in everyday and leisure activities, which can be filled in by teenagers with an intellectual disability themselves. Moreover, their psychometric properties have not been or insufficiently tested (Rainey et al. 2014). According to the review by Rainey et al., the only self-administered and at the same time most frequently used questionnaire is the Children's Assessment of Participation and Enjoyment (CAPE) and its companion measure Preferences for Activities of Children (PAC; both by King et al. 2004). The CAPE/PAC is intended for the age of 6 to 21 years and has also been translated into German (Fink et al. 2016). The revision of the German version showed that the internal consistency of the scales is not optimal and thus comparable to those from other studies (cf. Rainey et al. 2014). The test-retest reliability for the CAPE was also not satisfactory. A further criterion is its length (Fink et al. 2016). A general criticism of conventional questionnaires is that the self-reports, for example, on everyday activities, are retrospectively called and are therefore susceptible to recall bias (Stone and Litcher-Kelly 2006). In addition, the dynamic interplay between activity, the social environment and the subjective experience cannot be recorded at the moment.

One way to counter these methodological shortcomings is to use the Experience Sampling Method (ESM; Hektner, Schmidt, and Csikszentmihalyi 2007). The ESM belongs to a group of methods for the investigation of daily life with the common criteria: data sampling in real-life context, in real-time and on repeated occasions (Mehl and Conner 2012). The multiple *in situ* measurements are carried out over a relatively short period of one week or several weeks – which is why this method group is also called intensive longitudinal methods (e.g., Venetz and Zurbruggen 2015). The ESM therefore has high ecological validity. At the same time, their use is associated with increased efforts for researchers and participants, which can be reduced through the use of new technologies (e.g. smartphones with online functions or applications).

The ESM has already been widely used for research on education (e.g. Shernoff, Knauth, and Makris 2000), but less for research on participation. In a study by Seekins and colleagues (2007), five (adult) participants were asked at six times a day, for a total of seven weeks, their current location, activity and who is involved, and how fulfilling the activity was. In the ESM survey conducted by Shernoff and Vandell (2007), 165 high school students recorded at 35 non-school hours during one week, which was their primary activity with whom they exercised this activity as well as further details on this activity, e.g. how they felt. In a study by Zurbruggen and Venetz (2016), approximately 700 students from 40 classes of the 6th grade

reported at 14 times during a school week, among other things, on their current activity, the social context and their immediate emotional experience.

Emotional experience or affective states can be described by means of the two main dimensions valence (positive – negative) and activation (high – low). Prominently represented in the literature is the Circumplex model by Watson and Tellegen (1985), in which the original axes are rotated by 45 degrees and the two resulting dimensions are referred to as positive activation and negative activation (Yik, Russell, and Barrett 1999).

Research questions

Against the backdrop of these explanations, two questions will be clarified in this paper:

- (1) In the context of the first question, the activities of teenagers with and without SEN in their everyday lives as well as the social context are illuminated: What activities do teenagers do and how often in their leisure time? How much time do teenagers spend with their peers and family? Does the everyday life of teenagers with and without SEN look different? With regard to the normalisation principle, students with SEN in regular classes are expected to engage in similar activities in their free time and are as often associated with peers as students without SEN. In addition, students with SEN in special classes are expected to spend less time with peers than students with SEN in regular classes.
- (2) While quantitative aspects are taken into account in the first question, the second one is centred on the quality of the experience in the everyday life of the teenagers. Therefore, special emphasis is placed on the comparison of students with and without SEN: The following questions are to be clarified: Do teenagers experience school time and leisure time differently? How are performed leisure activities experienced? What is the significance of the social context for the quality of experience? Are there differential effects? Based on previous findings, it can be assumed that teenagers generally experience leisure time more positively than school time and social interactions with peers are particularly positive. No differential effects are expected.

Method

Sample and data basis

The sample comprised a total of 120 Swiss teenagers (41% female) from 71 classes of the eighth (20%) and ninth grade (80%). The average age was 15.8 years ($SD = 0.8$). In 18 female and 24 male students ($n = 42$) special educational need (SEN) was formally diagnosed during the primary school or shortly after the transition to the secondary school (7th grade). Of the 42 teenagers with SEN, 32 were taught in regular classes; 10 attended special classes. Based on these characteristics, three groups of adolescents were distinguished for the analyses: Adolescents without special needs ($n = 78$), adolescents with SEN in regular classes ($n = 32$) and adolescents with SEN in special classes ($n = 10$). The three groups differed neither in terms of gender distribution ($\chi^2 [2, n = 120] = 0.39, p = .875$) nor in terms of linguistic origin ($\chi^2 [4, n = 119] = 7.49, p = .110$) or socio-economic status ($F [2, 114] = 0.66, p = .517$).

Within the scope of the ESM survey, a total of 3930 protocols on current events as well as on their current affective state were gathered in their everyday lives. 172 protocols (4.4%), which were completed more than two hours after receiving a signal, were not considered for the analyses. Thus, the database comprised a total of 3758 protocols from 120 adolescents (on average 31.3 protocols per adolescent). The response-rate (74.6%) of the three groups of adolescents was not significantly different, $F(2, 117) = 0.01, p = .999$.

Procedure

The participating teenagers were recruited from a sample of over 300 students who had participated in a longitudinal study. In the context of a conventional survey, the teenagers could express their interest in participating in an ESM survey. From over 200 interested students, 120 adolescents were selected in such a way that the group of students with SEN and the group of students without SEN are as comparable as possible with regard to gender and linguistic origin. To obtain self-reports for representative samples of moments in the adolescents' daily lives, a time-based sampling design with a variable schedule was used (Bolger, Davis, and Rafaeli 2003). On seven consecutive days (one week), the participants received 6 daily signals from Monday to Friday between 7 am and 9 pm and on Saturday and Sunday between 10 am and 10 pm. The signals were distributed throughout the day. Thus, for example, during the weekend, the first signal came randomly between 10 am and 12 pm and the second randomly between 12 pm and 14 pm. A smartphone served as a signal generator, which was made available to the teenagers for the duration of the investigation. The responses were recorded online via smartphone. Responding to a questionnaire took three to four minutes. 78% of all questionnaires were answered within 10 min after receipt of the signal, 88% within 30 min.

Measures

The momentary affective state was recorded with each four items on the scales Positive Activation (PA) and Negative Activation (NA) by Schallberger (2005). One item example for PA is *excited vs. bored*, one for NA is *stressed vs. relaxed*. Operationalization is based on the Circumplex model of affective states of Watson and Tellegen (1985). According to Watson et al. (1999), PA and NA represent '... the operation of two broad, evolutionarily adaptive motivational systems that mediate goal-directed approach and withdrawal behaviours' (829–830). PA reflects the amount of energy and positive attention, whereas NA is the extent of unpleasant activation, which seeks dissolution. In the present study, the reliability (ω) of the two scales is both on the within-subject level (PA: .79; NA: .76) as well as on the between-subject level (PA: .93; NA: .89) satisfactory.

Activities as well as social interactions were covered by several branched questions. At first, the teenagers were asked whether the signal came during lessons or during leisure time. If in class, the teenagers were asked to indicate their current form of activity. In response, the categories *alone, in pairs, group work, class discussions, examinations and listening (teachers, classmates)* were available. If the teenagers were given a signal during their free time, they were asked to indicate whom they were with. Answers could be chosen among the following categories: *Partner, friends, classmates, family and other persons*. To record the current activity, the teenagers selected from a list of (groups of) activities. In situations in which

the current activity could not be assigned to a response, the teenagers could briefly describe their current activity in an openly formulated question.

Based on this information, two variables were created for the analyses: (a) The variable *time category*, which was used to distinguish between teaching and leisure time, and (b) the variable *social interaction* with the three categories *alone (on task)*, *with peers* and *with family*. In school context *alone (on task)* means that they worked individually, wrote an examination, or listened to the teacher or a classmate. In leisure time *alone (on task)* does not mean that they were alone, but that they did not interact with anyone (e.g. riding the train).

Analyses

To clarify the first question, by means of SPSS version 24 the data were aggregated on the characteristics of the current context (time category and social interaction) as well as the activities performed per person. These data inform about individual distributions of the time points on different contexts and activities during a week.

To answer the second question, based on the hierarchical structure of the data (occasions are nested in persons) two-level models were specified in *Mplus* version 7.4. Level 1 (within) includes the 3758 time-points, Level 2 (between) the 120 teenagers. Effects of the characteristics time category and social interaction on the quality of experience were specified at Level 1; differential effects were examined within the scope of multiple-group analyses.

Results

The results show that overall, an average of 28.6% ($SD = 9.3\%$) of the time points are during lessons and 71.4% ($SD = 9.3\%$) during leisure time. Corresponding estimates show that on average students spend approximately six hours at school on a normal school day. The proportion of time points for school teaching differs not significantly between the three groups of adolescents, those with no special educational needs, those with SEN in regular classes, and those with SEN in special classes, $F(2, 117) = 2.59, p = .080$.

If one focuses on social interactions in leisure time, it can be said that the teenagers are on average of 51.9% ($SD = 16.9\%$) of all time points alone (on task). Of the 48.1% of time points in which interactions take place, 25.6% are attributable to those with peers in and outside school, 22.4% to those in the context of the family. In summary, it can be said that teenagers interact with peers and with family equally frequently.

The central results for the first question, whether teenagers with and without SEN often interact with other people during leisure time, are illustrated in the form of box-whisker diagrams in Figure 1. The diagrams provide two essential insights: Adolescents with SEN in regular classes interact during leisure time with peers as much as with family on the average. In contrast, adolescents with SEN in special classes tend to interact during leisure time more often with family and somewhat less often with peers (or alone on task). One-factorial variance analyses thus show that teenagers with SEN in special classes interact significantly more often with family members, $F(2, 117) = 5.42, p = .006, \eta^2 = .09$.

Figure 1 also makes it clear that there are large differences in the frequency of interaction among the three groups of teenagers: For interactions with peers, the interquartile distances (i.e. the height of the grey box in Figure 1) are .22 (without SEN), .24 (with SEN in regular class), and .31 (with SEN in special class). For students without SEN, this means that half of

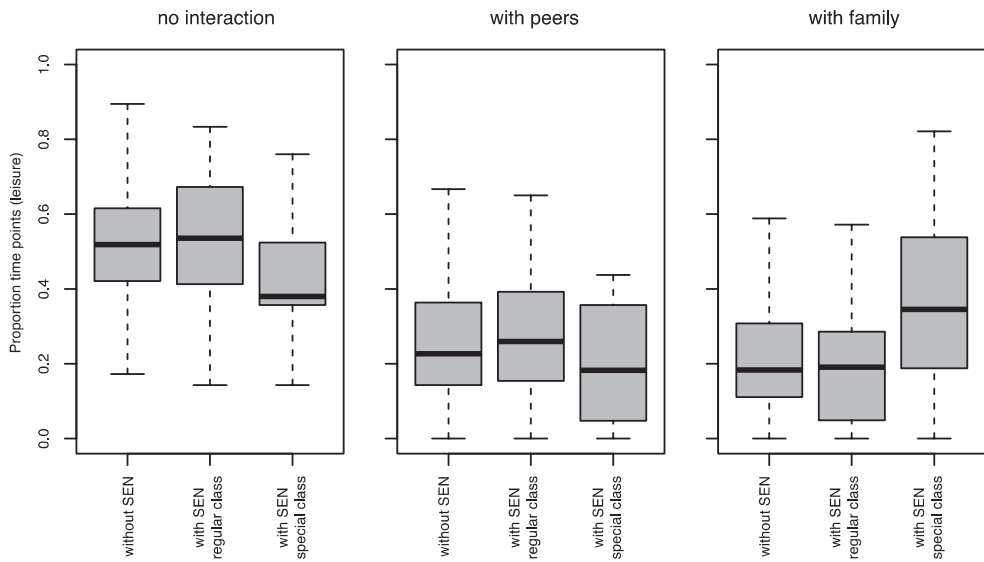


Figure 1. Frequency of social interactions during leisure time of adolescents with and without SEN.

them spend between 14% and 36% of their leisure time with peers. The ‘whiskers’ (the vertical lines below and above the box) show that on the one hand, 25% adolescents spend between 36% and a maximum of 67% of their leisure time with peers, and on the other hand, 25% adolescents in leisure time are never or relatively seldom (0–14% of all time points during leisure time) with peers.

Figure 2 gives an overview of the frequency and quality of the experience of the adolescents’ daily activities. A one-factorial, multivariate variance analysis reveals that adolescents

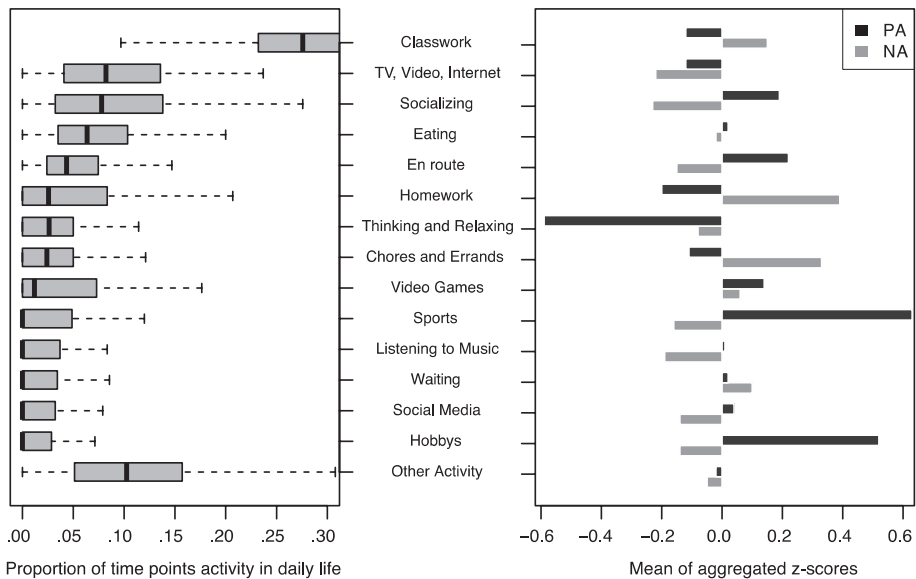


Figure 2. Frequency of activities in daily life of adolescents and the quality of experience.

with and without SEN do not significantly differ in how much time they use in their everyday life to perform certain activities (Wilks $\Lambda = .877$, $F [14, 105] = 1.05$, $p = .410$). Therefore, the results are described in general rather than group-specific. If one looks at the frequency of the activities performed (box plots on the left-hand side of Figure 2), one can find that teenagers spend almost 30% of their daily lives at school. Watching TV shows or surfing the Internet are the most frequently performed activities with 8.2% of all time points, followed by 'socializing' (7.8%), 'eating' (6.4%) and 'en route' (4.4%). It is also clear from this figure that there is a large difference between the teenagers in the number of times a particular activity is performed. In more than half of the teenagers, there was not a single signal when exercising a sports activity, listening to music, using social media or exercising a hobby.

The bar plots on the right-hand side of Figure 2 provide information on how these activities are experienced by teenagers in general. (The values shown are mean values of individual z-standardised values aggregated at person level). With regard to PA, it can be said that above all sporting activities as well as hobbies are sources of positive activation, but so also are socialising and being en route. In contrast, thinking and relaxing are activities that are linked to feelings of slack and boredom. Homework and chores are activities associated with a high negative activation (NA). Watching TV or surfing the Internet, socialising as well as listening to music are activities that obviously have a relaxing effect on teenagers. At the same time, PA and NA point out that sporting activities, hobbies, socialising and being en route are activities with a particularly good quality of experience (much PA, little NA).

The descriptive findings on the quality of experience of different everyday activities are a good introduction to the second question: Do daily social interactions have the same effect on the current affective state in the everyday life of adolescents with and without SEN? To clarify this, a series of multivariate multiple-group two-level CFA models were specified (Table 1). The main findings can be summarised as follows: The intraclass correlations (*ICC*) vary between .13 and .26. Thus, between 13% and 26% of the variance in the PANA-items fall back on person-related differences. Models M1 to M3 were used to test the measurement invariance of the PA and NA dimensions over the three subgroups. As can be seen in Table 1, the models have a good fit and the constructs are factorially invariant across each group. In a second step, the homogeneity of the variances of PA and NA and their covariance (M4) as well as the equality of mean values of PA and NA (M5) were tested. The results of the analyses show that only one parameter differs between the groups: The intraindividual variability of NA is significantly higher for adolescents without SEN than for adolescents with SEN.

In model M6, the covariates time category (lessons vs. leisure time), two dummy variables peer interaction (no vs. yes) and family interaction (no vs. yes) as well as the interactions between the time category and the dummy variables were included. In model M6a the regression coefficients across each group were equated. The model comparison between model M6a and M6 suggests that there are no differential effects. Overall, it can thus be stated that adolescents with and without SEN experience everyday life in general and daily social interaction specifically in a very similar way.

In terms of content, the findings can be summarised as follows (Table 2): Adolescents with and without SEN feel significantly less strongly negative during leisure time ($\beta = -0.26$, $z = -3.88$, $p < .001$), but they do not experience significantly more PA ($\beta = 0.13$, $z = 1.70$, $p > .089$). Social interactions with peers as well as with family have a positive effect on the current experience: social interactions are associated with more PA (peers: 0.43, $z = 5.29$,

Table 1. Model fit statistics for the subgroup comparisons of current emotional experience (PA and NA) and covariates.

Model	df	MLR- χ^2	CFI	TLI	RMSEA	SRMR _{w/B}	Model test	Δ MLR- χ^2	Δ df	p
<i>Measurement invariance</i>										
M1	100	249.53*	.977	.962	.035	.030/.158				
M2	134	289.78*	.976	.970	.030	.030/.150	M2 vs. M1	33.92	34	.471
M3	146	311.33*	.975	.971	.030	.034/.145	M3 vs. M2	20.17	12	.064
<i>Homogeneity of factor (co-)variances/means</i>										
M4	158	329.83*	.974	.972	.029	.045/.153	M4 vs. M3	22.06	12	.037
M4a	157	308.79*	.977	.975	.028	.040/.153	M4a vs. M3	2.28	11	.552
M5	160	315.70*	.976	.975	.028	.040/.157	M5 vs. M4a	6.96	3	.073
<i>Equality of regression coefficients</i>										
M6	232	445.12*	.971	.967	.027	.035/.155				
M6a	270	457.61*	.972	.970	.026	.039/.152	M6a vs. M6	13.60	16	.628

Note: N = 120. CFI = Comparative Fit Index, TLI = Tucker-Lewis-Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square Residual (SRMR_w = within, SRMR_b = between); Δ MLR- χ^2 = Nested χ^2 Difference for Maximum Likelihood Procedure with Robust Standard Errors (MLR).
*p < .001.

Table 2. Unstandardised regression coefficients of current emotional experience on time category (classwork vs. leisure) and social interaction.

	PA		NA	
	Estimate	SE	Estimate	SE
<i>Classwork, no social interaction (reference category)</i>				
Leisure (main effect)	0.128	0.075	-0.264***	0.068
Social interaction with peers (main effect)	0.432***	0.082	-0.287**	0.086
Social interaction with family (main effect)	0.244**	0.085	-0.185**	0.067
Social interaction with peers in leisure (interaction effect)	0.280**	0.097	-0.081	0.102

Note: $N = 120$. PA = Positive Activation, NA = Negative Activation.

** $p < .01$; *** $p < .001$.

$p < .001$, family: 0.24, $z = 2.88$, $p = .004$) and simultaneously with less NA (peers: -0.29 , $z = -3.34$, $p = .001$, family: -0.19 , $z = 2.75$, $p = .006$). Finally, the results show that social interactions with peers during leisure time have a significantly greater effect on PA ($\beta = 0.28$, $z = 2.88$, $p = .004$) than social interactions with peers in the classroom. Overall, the results show that for adolescents with and without SEN, social interactions with peers (both in school and during leisure time), but also with family, have an activating and relaxing effect on the current experience.

Discussion

Summary

The results suggest that students with SEN do not usually spend their everyday life differently than their peers. During almost half of their leisure time, the adolescents either interact with peers or equally with family. They spend quite a lot of time outside school in media consumption, i.e. watching TV and surfing the Internet, or in socialising, i.e. chilling with friends. The most positive experiences are during sporting activities, hobbies and socialising.

Adolescents with and without SEN do not differ in how much time they use in their daily lives for certain activities. However, there are large intraindividual differences regarding the frequency of activities performed during leisure time. Differences between the student groups are seen with focus on social interaction partners: During leisure time, students with SEN in separative settings interact more with their family and less with peers as students without SEN and students with SEN in regular settings. However, due to the small group size of students with SEN in separative settings, the results must be interpreted with reservations.

It is hardly surprising that teenagers experience leisure time in general more positively than school time. However, social interactions have a positive effect on the quality of experience in general – both in leisure time and at school. Particularly good is the emotional experience of adolescents, when they are with peers – best with peers in the leisure time. This also seems to apply to students with SEN in regular or in separative settings.

On the importance of peers for adolescents' everyday (school) life

The realisation that peers play an important role in teenagers' everyday life is trivial. With these findings, however, a somewhat differentiated picture of social participation of adolescents with and without SEN can be distinguished in terms of the subjective dimension.

The importance of peers is reflected in the very positive quality of experience of adolescents during leisure activities, where peers are the social interaction partners. An ESM study from Italy (Bassi and Delle Fave 2004) provided a comparable finding. Such situations are experienced by students without SEN as well as with SEN particularly pleasant. In addition, all the student groups studied tend to experience social contacts with peers in general similar – or in other words, students with SEN generally experience activities with peers no different than other students. The positive quality of experience in social interactions can be seen not only as a reference to a good social participation from a subjective point of view, but also as a basis for the development of a valued social role (Wolfensberger 2011).

Adolescents experience interactions with peers not only during their leisure time as particularly positive, but also in the school context. This finding is to be seen against the backdrop of the fact that schools and school classes do not correspond to a chosen peer context, but at the same time offer a major place for interactions among teenagers (Müller and Zurbriggen 2016). Secondary school thus assumes an important role in the development of social relations and social skills (Hofmann and Venetz 2017). Peer support strategies and arrangements, such as cooperative learning or peer tutoring, which are primarily used to support academic engagement, are also suitable for improving adolescents' social adjustment and participation (De Vroey, Struyf, and Petry 2016; Ladd, Herald-Brown, and Kochel 2009).

The circumstance that students with SEN from separative classes in their leisure time are more frequently associated with family compared to other learners and thus less frequently associated with peers is, however, to be regarded with a view to the normalisation principle rather critically. Especially adolescents with disabilities should be able to have 'normal' social experiences (cf. Nirje 1985).

Limitations and strengths of the study

An important limitation of the study is the already mentioned small number of participants with SEN in separative settings. This reflects a common problem of field studies with students from separative schools. Consequences are, as is known, low statistical power, inflated false discovery rate and reduced likelihood to discover significant effects. The results for students with SEN in separative settings thus have an exploratory character. (At this point it is important to note that the sample is quite large on the within-group or occasion level.)

Since the group of students with SEN in regular schools was only 32, it was also not possible to differentiate between the type of special needs education. According to results of Venetz et al. (2012), the emotional experience of differential effects for students with learning difficulties or with behavioural difficulties would have to be considered. For example, the emotional experience of students with behavioural difficulties fluctuated more widely over different teaching situations, and they were generally more stressed than their classmates. In the interpretation of the results, it should also be noted that explicitly, SEN was used as a 'status' for the formation of groups (and not standardised tests), since this should be decisive

in practice. However, due to different methods of diagnosis, the students with this official label are not comparable across different schools, municipalities and cantons.

One of the strengths of the study is the adequate and at the same time innovative methodological approach to this phenomenon. With ESM, activities, social interactions and other characteristics of a situation can be directly accounted for by the adolescents themselves. ESM therefore has high ecological validity and provides a promising alternative to the assessment of subjective quality of social participation. Furthermore, it allows the investigation of complex relationships between personal and contextual features of social interactions.

A further benefit of the study is its focus on secondary school, considering the fragmented inclusion research at this school level (De Vroey, Struyf, and Petry 2016). With the results on the quality of experience of teenagers both during lessons as well as in leisure time and the social context in particular, the study can contribute to a more comprehensive picture of the subjective quality of social participation in the everyday life of adolescents – not least of those with status SEN.

Further studies

Although during civil rights declarations (United Nations 2006) the right of social participation for everyone has become an internationally recognised standard, and participation has become increasingly the focus of researchers, there is still a great need for research around the multidimensional construct of social participation (Granlund 2013).

In addition to the results obtained, one could also examine whether the adolescents surveyed during leisure time are mainly with their classmates or with other peers. Moreover, increased sophisticated analyses could provide insight into the quality of interaction in specific everyday situations (e.g. socialising). When planning a further study, it should be noted that a more balanced and larger sample (especially students from special classes) should be considered.

An addition to the ESM with observing procedures would be a gain for further research on the quality of social participation, in order to contrast the subjective view with an external perspective. To combine ESM with methods for detection of social networks such as social cognitive mapping, with which the identification of different peer groups and their group structure is possible (Pijl et al. 2011), is also of interest.

Finally, it is necessary to examine how the subjective social participation in the everyday life of adolescents – with or without SEN – develops in the course of secondary education and in transition to further schools or into the professional world.

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No potential conflict of interest was reported by the authors.

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