

Adolescents with Physical Disabilities and Their Wellbeing and Peer Relationships Within Secondary Schools in Iceland

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2014 BSc in Psychology

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Foreword

Submitted in partial fulfillment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

Abstract

Previous research has shown that adolescents with physical disabilities find it more challenging to integrate into the school system and do not always feel included in their peer group. They appeared to be more solitary than is the norm; especially during break times. They were also less likely to be chosen as playmates and had fewer friends than able-bodied adolescents. Furthermore, disabled adolescents said that they experienced social exclusion both from teachers and their peers that often lead to verbal and physical bullying. In this research, the wellbeing of students with physical disabilities in their school environment will be estimated. The data was from a larger dataset used in investigations of the Icelandic Centre for Social Research and Analysis (ICSRA). The sample, used in this study, consists of 2565 students, of which 628 reported having a physical disability. The results were analyzed to ascertain whether the presence of a physical disability had a significant effect on adolescents. The results showed a disparity between disabled and able-bodied adolescents where disabled adolescents had lower levels of wellbeing in school and their peer relationships were not as well developed.

Keywords: adolescents, physical disability, wellbeing, peer relationships

Útdráttur

Rannsóknir hafa sýnt að ungmennum með líkamlega fötlun þykir erfiðara að aðlagast skólakerfinu og finnst þau oft ekki vera hluti af hópnum. Þau þykja vera meira ein en þykir eðlilegt, sérstaklega í frímínútum og eru sjaldnar valin sem leikfélagar og eiga því færri vini. Þá finnst þeim þau upplifa félagslega útilokun frá bæði kennurum og skólafélögum sem í mörgum tilfellum endar með munnlegu eða líkamlegu einelti. Í þessari rannsókn verður skoðuð líðan ungmenna með líkamlega fötlun í framhaldsskólum á Íslandi. Gögnin eru fengin úr stærra gagnasafni frá Rannsóknum og greiningu. Úrtakið sem notast er við í þessari rannsókn inniheldur 2565 nemendur. Þar af eru 628 einstaklingar sem svara því að þeir glími við líkamlega fötlun. Við yfirferð á niðurstöðum var skoðað hvort það skipti máli að vera með líkamlega fötlun eða ekki. Niðurstöður sýndu mismun á milli þeirra sem voru með líkamlega fötlun og þeirra sem ekki voru með líkamlega fötlun þar sem líkamlega fatlaðir voru með lægri skor fyrir vellíðan í skóla og vinasambönd þeirra voru ekki jafn þróuð eins og hjá ungmennum án líkamlegrar fötlunar.

Lykilorð: ungmenni, líkamleg fötlun, vellíðan, vinasambönd

Adolescents with Physical Disabilities and Their Wellbeing and Peer Relationships

Within Secondary Schools in Iceland

It can be difficult to be an individual with a physical disability where many limitations in life must be dealt with and overcome (Murugami, 2009). Disability is defined as a deviation due to a physical or mental impairment, focusing on what individuals cannot do compared to what people who are able-bodied can do (Sigurjónsdóttir, n.d.). Decisions are too often made for those with a physical disability and their activities often chosen by others; this results in disabled people often living a highly structured life (Murugami, 2009). Society does not often understand that impairment is a part of humanity and instead, people tend to look at the effects of impairment as obstacles and that people would rather that a person with a disability should fit into societal structures than the structure fitting into the disabled person's needs (Murugami, 2009). It is due to this that rights are very important for this group of people; one of those rights is the right to an education (Icelandic Human Rights Centre, n.d.).

A longitudinal study for measuring quality of life of adolescents in primary and high schools with physical disabilities showed different findings than authors had expected (Lin, Ju, Lee, Yang & Lo, 2011). Authors expected to see a stable quality of life over the years for adolescents with a physical disability due to adaptation and adjustment over the years, but findings were not consistent with this. Results showed that there was a decline in quality of life for adolescents with physical disabilities, and therefore that quality of life was not a static phenomenon for them (Lin et al., 2011). Quality of life for individuals with a physical disability has shown that they had rather low levels when quality of life was measured. (Zheng et al., 2014). Their quality of life had a lot to do with the severity of their disability since that had a great influence

of their quality of life. Their attitude and personal experience of the disability was also significant when this was measured (Zheng et al., 2014).

Previous research has shown that adolescents with disabilities had difficulties adjusting to the school system (Hemmingson & Borell, 2002) and they felt that their needs were never fully met in the school environment (Egilson, Gestsdóttir, Björnsdóttir & Björnsdóttir, 2003). The majority of adolescents with physical disabilities had experienced some form of barriers in school, in both the physical and social environments of the school system (Hemmingson & Borell, 2002), where they felt that not all activities appealed to them and their circumstances; which in turn made them feel excluded from the group (Hemmingson & Borell, 2002; Lightfoot, Wright & Sloper, 1999).

It seems that adolescents with physical disabilities were not able to participate in school activities that their peers could usually be a part of (Lindsay & McPherson, 2012) and said that they had experienced not having as many opportunities in their daily school-lives which made them feel excluded for being different (Lindsay and McPherson, 2012). In the classroom they were often forced to work alone in a separate room from other students (Lightfoot et al., 1999). That however, was not the only place where they appeared to be isolated because in school breaks, adolescents with disabilities were also often alone and it appeared that they had little access to social contact with other students (Egilson et al., 2003; Eriksson, Welander & Granlund, 2007). They were usually found to be alone somewhere else, engaged in another activity and little support was provided to prevent this from happening (Egilson et al., 2003).

In the school system, individuals with disabilities felt that some of their peers had a negative attitude towards them (McDougall, Dewit, King, Miller & Killip,

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2004), although they seemed to be understanding (Lindsay & McPherson, 2012). They believed that the main reason for these negative attitudes were mainly due to a lack of understanding regarding their condition and circumstances. This was how they also justified their experience of bullying (Lindsay & McPherson, 2012). Adolescents with disabilities seemed to have experienced social exclusion both from their teachers and their peers, which in many cases led to a verbal and physical bullying (Lindsay & McPherson, 2012). Bullying appeared to be something adolescents with physical disabilities had often been the victims of (Lightfoot et al., 1999). In a study by Lightfoot et al. (1999) focusing on students in mainstream secondary schools, approximately one third of participants reported experiences of bullying. In most cases the abuse was verbal, where adolescents with physical disabilities experienced name-calling or being laughed at in most cases. In some cases, however they were the victims of physical abuse from their peers where they were most commonly spat at or were pushed (Lightfoot et al., 1999).

A study made on students with health conditions that could have an impact on their school life showed that most of all they needed support from others to be able to successfully manage the effects of their condition and their circumstances (Lightfoot et al., 1999). Concerning peer relationships in school, previous research has demonstrated various results. It appeared that individuals with physical disabilities have found it more challenging to develop friendships (Thomas, Roller, Scharnhorst, Cunningham & Warschausky, 2006), had fewer friends and that they were rarely chosen as play peers in school (Eriksson et al., 2007). In the Lightfoot et al (1999) study mentioned previously, more than half of the participants, had some degree of difficulty with their peers and often felt ignored or that they were the focus of curiosity: having to answer frequent questions about their condition and tended to be

subjected to staring. The other half of participants said that their condition did not make any difference to their peer relationships and that they were able to build close friendships in school and had good, supportive friends (Lightfoot et al., 1999). The reason for the difficulties making friends may be due to limited access to social activities or because of a lack of peer understanding of their disabilities (Thomas et al., 2006). There is a chance that individuals with physical disabilities are at risk of experiencing social isolation (Thomas et al., 2006) and loneliness (Hopps, Pépin, Arseneau, Fréchette & Bégin, 2001; Rokach, Lechcier-Kimel & Safarov, 2006). Loneliness has been shown to be associated with a lack of physical independence, social anxiety and lower social skills for individuals with physical disability (Hopps et al., 2001). Therefore individuals with a physical disability are at greater risk for loneliness (Rokach et al., 2006).

In this study certain aspects concerning adolescents with physical disabilities and their wellbeing and peer relationships within secondary schools will be examined. Based on previous literature, the following hypotheses were put forward hoping to cast a light on the wellbeing and peer relationships for adolescents with physical disabilities.

Hypothesis 1

Wellbeing in school is lower for adolescents with physical disabilities. They are less satisfied with their life, not as happy, and experience more bullying and abuse than adolescents without physical disabilities.

Hypothesis 2

Peer relationships for adolescents with physical disabilities are less well developed. They are lonelier, have more often been rejected or separated from a

friend, and have a less support from their friends compared to those without physical disabilities.

Method

Participants

The sample in this study was taken from a larger dataset, which is used in investigations, by the Icelandic Centre for Social Research and Analysis (ICSRA) (Pálsdóttir, Sigfúsdóttir, Kristjánsson, Guðmundsdóttir & Sigfússon, 2011). This was a population study submitted in 2010. Participants were all full-time students in Icelandic secondary schools and were present in the lesson when the survey was submitted. The study was presented to the students in all secondary schools in Iceland. The entire sample had 11388 students, 5439 boys and 5837 girls. Among those were 112 students who did not respond regarding their sexuality. The response rate in this sample was 70.5 % of the population (Pálsdóttir et.al, 2011).

The sample, used in this study, was 2565 students, 1277 boys and 1278 girls. 10 participants did not respond to the question about their gender. The birth year of participants ranged between 1986 and 1996 with the most participants being born in 1994 (27%) making them 16 years old when the questionnaire was submitted. The remaining participants were broken down as follows: 22.2% were born in 1993, 18.8% were born in 1992 and the final 15.4% of participants were born in 1991. In this study all participants that answered affirmatively to the question regarding physical disability were used. The remainder of the sample was randomly chosen from the remaining participants. There were 628 participants from the sample that said they had a physical disability, 1878 people said they did not. The remaning 59 people chose not to answer this question. There were 341 boys who said they had a

physical disability and 284 girls. Participants with a physical disability were 24.5% of the sample with the other 75.5% of the sample being participants without a physical disability.

Measures

The questionnaire made by ICSRA contained 110 questions and was 34 pages long. Questions asked were all related to the adolescent's lifestyle and overall wellbeing. Items concerning wellbeing, peer relationships, bullying, and physical disability were selected for this study from the questionnaire to cast light on the wellbeing and peer relationships of adolescents with physical disabilities. This report uses 27 items from 7 questions included in the questionnaire, which can be seen in its full form in the Appendix (p.23).

Research design

Independent variable.

The independent variable was physical disability. To determine whether a participant had a physical disability one question from the questionnaire was used in which participants were asked if they had a physical disability. Answer possibilities were: "No" and "Yes". Participants were then divided into two groups regarding what their answer was. Participants with physical disabilities (24.5%) were grouped together and their results compared to those without a physical disability (75.5%).

Dependent variables.

There were two dependent variables, wellbeing in school and peer relationships. To measure wellbeing, results from 3 questions with 14 items in total were examined. For peer relationships, 3 questions were examined, with 12 items in total.

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Nine items regarding wellbeing in school were taken from one question.

Participants were asked how well the following statements described them: 1) I feel bad in school, 2) I want to quit school, 3) I want to switch schools, 4) I do not get along with the teachers, 5) I feel bad in class, 6) I feel bad during break times, 7) I feel like I do not belong in school, 8) I do not get along with other students in school, and 9) I feel like I am left out in school. Answer possibilities were on a five-item Likert scale in the range: 1="Always applies to me", 2="Often applies to me", 3="Sometimes applies to me", 4="Rarely applies to me", 5="Never applies to me". The nine items were recoded into a single factor, "Wellbeing in school" and were quantified on a scale ranging from 9-45, with the higher score representing a greater degree of wellbeing in school.

More questions were used in regards to the dependent variable, wellbeing in school. One question with two items, where participants were asked how well they felt the following statements described them: 1) I am satisfied with my life, and 2) I am happy. Answer possibilities ranged on a four item Likert scale: 1="Describes me very well", 2="Describes me rather well", 3="Does not describe me very well", 4="Does not describe me at all". The higher score representing higher satisfaction with one's life and greater happiness.

The last question regarding wellbeing in school, where participants where asked, "How often have you been aware of the following in the last 12 months": 1) A whole group bullied you alone, 2) A whole group attacked you and hurt you, and 3) A whole group attacked a group that you were a part of. Answer possibilities were on a five-item Likert scale in the range: 1="Never", 2="Once", 3="Two times", 4="3-4" times", and 5="5 times or more". These five items were recoded together into one

factor named, "Bullying/abuse" and was on a scale of 3-15, with the higher score representing that a participant had more often been a victim of bullying or abuse.

There were three questions regarding peer relationships consisting of 12 items in total. In the first, participants were asked to answer the following question, "How easy is it for you to get the following from your friends?" 1) Caring and warmth, 2) Conversations about personal things, 3) Advice concerning the education, 4) Advice concerning something else, and 5) Help with something. Answer possibilities were on a four-item Likert scale which ranged over: 1="Very easy", 2="Rather easy", 3="Rather hard", and 4="Very hard". The values were turned and recoded from the original: 1="Very hard", 2="Rather hard", 3="Rather easy", and 4="Very easy". These items were recoded together into one factor named, "Support from friends", and were on scale from 10-25, with the higher score representing higher difficulty in a participant obtaining support from a friend.

The second question regarding peer relationship asked the participants if the following had ever happened to them: 1) You have been rejected by a friend, and 2) You have been separated from a friend. Answer possibilities were on a four item Likert scale and ranged over, 1="Yes, in the last 30 days", 2="Yes, in the last 12 months", 3="Yes, in more than 12 months", and 4="No". The answer possibilities were required to be modified because the question changed to, "Have you ever been rejected or separated by a friend in a lifetime"?

Due to this the answer possibilities were recoded and the first three answer possibilities were merged into one, "Yes".

The last question regarding peer relationships, where participants were asked on a four-item Likert scale, "How often in the last 30 days have you felt like you were lonely?" The answer possibilities ranged through: 1="Almost never", 2="Seldom",

3="Sometimes", and 4="Often". A higher score indicated that the participants were lonelier.

Procedure

ICSRA sent out the questionnaires in 2010 to all secondary schools in Iceland for the study to be conducted in the schools, respectively (Pálsdóttir et al., 2011). Teachers in each school submitted the study to all the students who were present for the lesson when the study was performed. Anonymity was ensured to the highest degree possible and instructions were clear to participants that they must not write down their name, social security number or other identifying information on the answer sheets to make it impossible to trace their answers back to them. Participants were asked to answer all questions to the best of their ability and conscience, and to ask for help if needed. After the examination the students were asked to place their completed answer sheets in an empty envelope that accompanied the survey and hand it to their teacher. Students had the option to refuse to participate in the study (Pálsdóttir et al., 2011).

Data analysis

For a comparison of the differences between adolescents with physical disabilities and adolescents without physical disabilities in comparison to other variables, a chi-square test of independence was performed. To see if variables matched together and for the integration of variables into one factor a factor analysis was performed and the results used to examine whether there was a difference in the factors according to whether physical disabilities were involved or not. To accomplish this, one-way ANOVA was performed to see if there was a significant difference between those who had physical disabilities and those who did not have physical disabilities and to check if the null hypothesis could be rejected.

Results

In Figure 1, satisfaction with life is compared between physically disabled students and able-bodied students in relation to the hypothesis regarding wellbeing in school. A chi-square test of independence was performed and there was a significant difference in reports of satisfaction with life between physically disabled students and able-bodied students. A significant difference was found between disabled and able-bodied students, $X^2(3, N=2479)=30.914$, p<.001, where a higher percentage of disabled youth reported being not fully satisfied with their life or not satisfied at all with their life. Results showed that adolescents with physical disabilities seemed to be less satisfied with their life when compared to able-bodied adolescents.

"I am satisfied with my life", describes me:

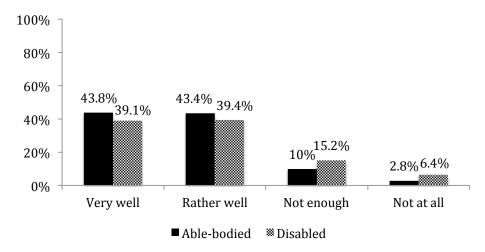


Figure 1. Satisfaction with life compared between physically disabled students and able-bodied students.

In Figure 2, happiness is compared between disabled and able-bodied adolescents with a chi-square test of independence in relation to the first hypothesis regarding wellbeing in school. As can be seen a lower percentage of disabled students reported being happy. The difference between disabled students and able-

bodied students was statistically significant, $X^2(3, N=2478) = 25.476$, p < .001, and showed that adolescents with physical disabilities seemed to be less happy than ablebodied adolescents.

"I am happy", describes me:

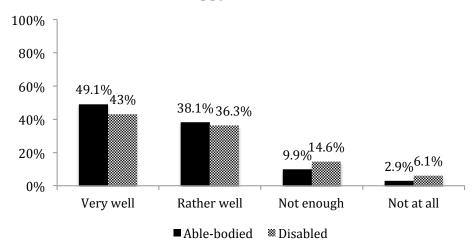


Figure 2. Happiness compared between physically disabled students and able-bodied students.

In Figure 3, a comparison of loneliness in the last 30 days was done between adolescents with physical disabilities and able-bodied adolescents regarding the hypothesis about peer relationships. A chi-square test of independence was performed for comparison where a higher percentage of loneliness for adolescents with physical disabilities can bee seen. The difference was statistically significant, $X^2(3, N=2475) = 48.478, \ p < .001$, where the difference was remarkably high and adolescents with physical disabilities appeared to be a lot lonelier than adolescents without physical disabilities.

How often have you been lonely in the last 30 days?

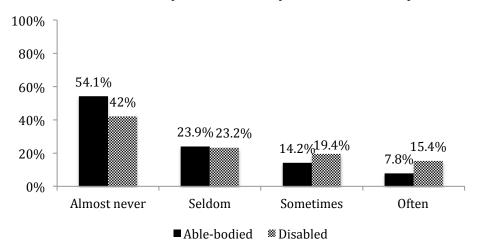


Figure 3. Loneliness compared between physically disabled students and able-bodied students.

In Figure 4, a comparison between disabled and able-bodied adolescents based on their experience of rejection and separation from a friend. These findings are related to the second hypothesis regarding peer relationships for adolescents. A chi-square test of independence was performed and findings showed a significant difference, $X^2(1, N=2506) = 21.676$, p < .001, where adolescents with disabilities had experienced a rejection or a separation from a friend more often in a lifetime than able-bodied adolescents.

Have you ever been seperated or rejected by a friend in a lifetime?

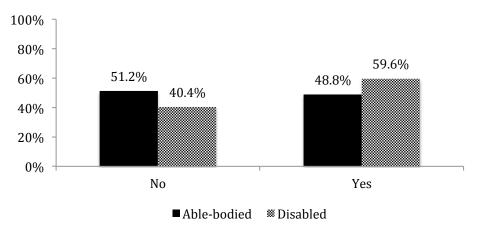


Figure 4. Rejection and separation from friend compared between physically disabled students and able-bodied students.

One-way ANOVA was performed for comparison of wellbeing in school, support from friends, and bullying or abuse between adolescents with physical disabilities and adolescents without physical disabilities. As can be seen in Table 1, physically disabled students reported lower levels of wellbeing in school than their able-bodied peers. That was done in relation to the first hypothesis about wellbeing in school being less for adolescents with physical disabilities. The difference was statistically significant, F = 93.415, p < .001, and disabled adolescents had less wellbeing in school where they had a lower score, due to a higher score representing more wellbeing.

To ascertain whether there was a significant difference in support from friends if the participant was disabled or able-bodied a comparison was made in relation to the second hypothesis regarding peer relationships. The difference was significant, F = 60.589, p < .001, where a higher score meant it was harder to get a

support from a friend. Disabled adolescents had a higher score, so it was harder for them.

Bullying and abuse scores were examined at to see if having a physical disability made a difference in relation to the first hypothesis regarding the wellbeing of adolescents in school. The difference between disabled and able-bodied adolescents was statistically significant, F = 92.266, p < 0.01, where the higher score meant that participants had more often experienced bullying which in this case were adolescents with a physical disabilities.

Table 1.

Wellbeing in School, Having Been Bullied or Abused and Support from Friends,

Number of Cases, Means, Standard Deviations, F Distribution and p Values by

Frequency for Disabled and Able-bodied.

		N	M	SD	F	p
Wellbeing in school						
	Disabled	592	37.79 (9-45)	8.12		
	Able-bodied	1833	40.58 (9-45)	5.32		
	Total	2425	39.90 (9-45)	6.24	93.415	<i>p</i> <.001
Support from friends						
	Disabled	611	14.15 (10-25)	3.98		
	Able-bodied	1861	12.97 (10-25)	3.02		
	Total	2472	13.26 (10-25)	3.32	60.589	<i>p</i> <.001
Bullying or abuse						
	Disabled	587	3.99 (3-15)	2.66		
	Able-bodied	1815	3.25 (3-15)	1.11		
	Total	2402	3.43 (5-15)	1.66	92.266	<i>p</i> <.001

Discussion

The reason for this study was to examine whether adolescents with physical disabilities had lower levels of wellbeing in school and if so, what possible variables could have an effect on that. So with respect to previous studies hypotheses were put forward and then certain questions and answers were looked at from ICSRA.

The first hypothesis stated that wellbeing in school was worse for adolescents with physical disabilities. Results supported this hypothesis, since the findings showed that adolescents with physical disabilities had less wellbeing in school than their able-bodied peers. The findings also showed that adolescents with physical disabilities were less satisfied with their life and less happy than adolescents without physical disabilities. These findings were consistent with previous literature where adolescents with physical disabilities had lower levels of quality of life (Zheng et al., 2014). Adolescents with physical disabilities had also found it not only harder to adjust to the school system (Hemmingson & Borell, 2002), but they had also experienced social exclusion and felt that they had fewer opportunities than their classmates (Lindsay & McPherson, 2012). They also felt as if they were being left out for being different (Lindsay & McPherson, 2012) and sometimes they had to work alone in a separate room (Lightfoot et al., 1999). One component of wellbeing in school was also whether participants had experienced being bullied or abused. Previous findings had shown that adolescents with physical disabilities had generally experienced both bullying and abuse (Lightfoot et al., 1999). The abuse was more often verbal, such as being called names or being laughed at. If they had experienced physical abuse it was most common to have experienced being spat at or pushed (Lightfoot et al., 1999). These study findings showed that adolescents with physical

disabilities had more often been bullied or been the victims of abuse more often than adolescents without physical disabilities.

The second hypothesis stated that adolescents with physical disabilities had worse relationships with their peers than adolescents without physical disabilities. That hypothesis was supported by findings showing that adolescents with physical disabilities had more often been rejected or separated from their friends in their lifetime. Findings also showed they had less support from their friends and were lonelier than adolescents without physical disabilities. The findings for the loneliness showed a very clear difference between disabled and nondisabled adolescents, where students with physical disabilities were significantly lonelier than able-bodied students. Previous studies had shown that individuals with physical disabilities were at risk of social isolation (Thomas et al., 2006) and loneliness (Rokach et al., 2006). This could be due to: a lack of understanding of their circumstances (Lindsay & McPherson, 2012), because they had limited access to social events (Lightfoot et al., 1999) or that they had a lack of social skills or physical independence (Hopps et al., 2001). Previous findings also showed that adolescents with disabilities found it more often challenging to develop a friendship (Thomas et al., 2005), that they were chosen less often as peers and that they had fewer friends than adolescents without physical disabilities (Eriksson et al., 2007). That could, for example, be seen in where they appeared to be more often alone in school breaks than their able-bodied peers (Egilson et al., 2003; Eriksson et al., 2007).

The strengths of this study were that the sample was rather large, so results were reliable and reflected the population well. The sample of physically disabled adolescents was also large and should reflect the population it was supposed to represent more accurately as a result of this. Having a large sample of physically

disabled subjects made the results much more reliable and therefore they were better in comparison with the able-bodied sample. Other advantages were that the questionnaire dealt with many important issues, was very comprehensive and covered almost everything related to young people in one way or another. In addition to this the database was taken from ICSRA, which is a highly respected research agency and has a large database in their possession regarding young people in Iceland.

This study had a few limitations and disadvantages. Firstly, it was not asked about what kind of physical disability participants had. Only, if they had a physical disability or did not. There are many kinds of physical disabilities and the severity of disabilities is different. Attitude towards physically disabled adolescents could be different depending on the severity of their disability. The severity of their disability could also have affected their wellbeing in school, satisfaction with life and happiness. In some cases physically disabled individuals also have a developmental impairment, which could also have affected the findings in some way or another. Other factors, which might have affected the answers of the participants, were that students might not have answered the survey questions honestly. Possibly there was not a sufficient gap between students in the classroom during the survey period, allowing classmates to influence the answers of the participants. Teachers could also have given incorrect or misleading instructions and it is possible that some data was unusable due to personally identifying information being included on the answer sheets

There was a significant disparity between the result sets showing that adolescents with physical disabilities had lower levels of wellbeing in school and had poorer peer relationships than adolescents without physical disabilities. Even taking into consideration the significant disparity between disabled and able-bodied

adolescents, most of those with physical disabilities were doing well in life. The majority had not been separated or rejected by their friends in a lifetime and neither had most of them ever been bullied or abused. Most had supportive friends and most had no experience of being lonely. A majority reported that being happy and satisfied with their life described them very well and their wellbeing in school was for most at high levels. Therefore, for future research, it could be interesting to look at the differences between individuals with physical disabilities. That is, between individuals with physical disabilities who are doing well and those who are not.

References

- Egilson, S. Þ., Gestsdóttir, A. M., Björnsdóttir, E., & Björnsdóttir, I. D. (2003). "Mig langar soldið til þess að geta gert svipað og aðrir krakkar": upplifun og reynsla nemenda með líkamlega skerðingu á skólaumhverfi sínu og notagildi íslenskrar staðfæringar á matstækinu Upplifun nemenda á skólaumhverfi (UNS). *Iðjuþjálfinn*, 25(1), 28-32.
- Eriksson, L., Welander, J. & Granlund, M. (2007). Participation in Everyday School Activities For Children With and Without Disabilities. Journal of Developmental and Physical Disabilities, 19(5), 485-502.
- Hemmingson, H. & Borell, L. (2002). Environmental Barriers in Mainstream Schools. *Child: Care, Health and Development, 28*(1), 57-63.
- Hopps, S. L., Pépin, M., Arseneau, I., Fréchette, M. & Bégin, G. (2001). DisabilityRelated Variables Associated with Loneliness Among People with Disabilities.*Journal Rehabilitation*, 67(3), 42-48.
- Icelandic Human Rights Centre. (n.d.). *Réttindi fatlaðra*. Retrieved October 26th 2013 from Icelandic Human Rights Centre website:

 http://www.humanrights.is/mannrettindi-og-island/hopar/fatladir/.
- Lightfoot, J., Wright, S. & Sloper, P. (1999). Supporting Pupils in Mainstream Schools with an Illness or Disability: Young People's views. *Child: Care, Health and Development*, 25(4), 267-283.
- Lin, J. H., Ju, Y. H., Lee, S. J., Yang, Y. H., & Lo, S. K. (2011). Examining Changes in Self-Perceived Quality of Life in Children and Adolescents with Physical Disability Using a Longitudinal Design. *Disability & Rehabilitation*, 33(19/20), 1873-1879.

- Lindsay, S. & McPherson. A. C. (2012). Experiences of Social Exclusion and Bullying at School Among Children and Youth With Cerebral Palsy. *Disability & Rehabilitation*, *34*(2), 101-109.
- McDougall, J., Dewit, D. J., King, G., Miller, L. T. & Killip, S. (2004). High School-Aged Youths' Attitudes Toward their Peers with Disabilities: the role of school and student interpersonal factors. *International Journal of Disability, Development & Education, 51*(3), 287-313.
- Murugami, M. W. (2009). Disability and Identity. *Disability Studies Quarterly*, 29(4).
- Pálsdóttir, H., Sigfúsdóttir, I. D., Kristjánsson, Á. L., Guðmundsdóttir, M. L. & Sigfússon, J. (2011). *Ungt fólk 2010: Framhaldsskólanemar*. Reykjavík: Rannsóknir og greining.
- Rokach, A., Lechcier-Kimel, R. & Safarov, A. (2006). Loneliness of People with Physical Disabilities. *Social Behavior and Personality*, *34*(6), 681-699.
- Sigurjónsdóttir, H. B. (n.d.). *Gildi félaglsegra sjónarhorna og hugtaka í félagslegri þjónustu: Mótum framtíð*. Ministry of Welfare: Reykjavík. Retrieved December 15th 2013 from Ministry of Welfare Website: http://www.velferdarraduneyti.is/media/erindi/motum_framtid/Hanna_Bjorg_Sigur jonsdottir Gildi felagslegra Sjonvarhorna.pdf.
- Thomas, P., Roller, S. Scharnhorst, A., Cunningham, S. & Warschausky, S. (2006).

 Study Explores How Children With Physical Disabilities Make Friends: How Can
 Parents and School Personnel Help? Michigan Department of Education: United
 States of America. Retrieved May 2nd 2014 from Michigan Department of
 Education Website: http://focus.cenmi.org/wp-content/uploads/2010/08/GATA06-01.pdf.

Zheng, Q. L., Tian, Q., Hao, C., Gu, J., Ramona, L. C., Tao, J. T., Liang, Z. I., Chen, X. L., Fang, J. Q., Ruan, J. H., Ai, Q. X. & Hao, Y. T. (2014). The Role of Quality of Care and Attitude Towards Disability in the Relationship between Severity of Disability and Quality of Life: Findings from a Crosssectional survey among people with physical disability in China. *Health & Quality of Life Outcomes*, 12(1), 1-22.

Appendix

16.	. Hversu vel finnst	bér	eftirfarand	li staðhæ	efingar	eiga v	rið um	big?	Merktu	EINN	reit í	HVER	IUM lið.

io. Hversu vei illinst per eitiffaran	ui staona	enngar eiga vi	io um pigr Me	iktu i Elinin	tett i fivekjom no.
g) Mér líður illa í skólanum	Á nær alltaf við um mig		Á stundu við um mig	við	aldrei við
h) Mig langar til að hætta í skólanum					
i) Mig langar til að skipta um skóla					
j) Mér semur illa við kennarana					
 k) Mér líður illa í kennslustundum l) Mér líður illa í frímínútum m) Mér finnst ég vera utanveltu í skólanum 					
n) Mér semur ekki vel við aðra nemendur í skólanum					
) Mér finnst ég vera lögð/lagður í einelti í skólanum					
28. Hversu auðvelt eða erfitt væ HVERJUM lið.	eri fyrir þ	oig að fá eftirt	alið hjá <u>VIN</u>	JM þínum?	Merktu í EINN reit í
		Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
a) Umhyggju og hlýju					
b) Samræður um persónuleg má	lefni				
 c) Ráðleggingar varðandi námið 					
 d) Ráðleggingar varðandi önnur (viðfangsefni) þín 	verk				
e) Aðstoð við ýmis verk					
30. Hversu vel eiga eftirfarandi fi	ıllyrðing	gar við um þig	g? Merktu í E	INN reit í H	VERJUM lið.
		Lýsir mér	Lýsir mér	Lýsir mér	Lýsir mér
f) Ég er ánægð(ur) með líf mitt		mjög vel	nokkuð vel	ekki nógu vel	alls ekki
g) Ég er hamingjusöm/hamingjus	amur				

33. Hversu oft varðst þú var/vör við efti Merktu í EINN reit í HVERJUM li		íðan eða (óþægind	li <u>síðastli</u>	ona 30 da	<u>ga</u> ?				
o) Þér fannst þú einmana	Nær aldrei Sjaldar		Stundum		Oft					
41. Hefur eitthvað af eftirfarandi kom <u>FLEIRI</u> reiti eftir því sem við á.	nið fyrir þig?	Svaraðu	ÖLLU	M liðum	og merl	ctu í <u>EINN</u>	I eð∶			
	síð	i, á ustu ögum	Já, á síðustu mánuð	12 n	Já, fyrir neira en 12 nánuðum					
 k) Þér verið hafnað af vinum eða vinkonu l) Þú lent í viðskilnaði við vin þinn eða 		_		-						
45. Átt þú við einhverja líkamlega fött Nei Já	lun að stríða]	? Merktu	ı aðeins	i ANNA	N reitin	n.				
79. Hversu oft hefurðu orðið fyrir eftirfarandi síðastliðna 12 mánuði? Merktu í EINN reit í hverjum lið										
 a) Heill hópur stríddi þér einni/einum b) Heill hópur réðst á þig eina/einn og s c) Heill hópur réðst á hóp sem þú varst 	meiddi þig		Einu sinni	Tvisvar sinnum	3-4 sinnum	5 sinnum eða oftar				