

Poziom lęku a postawy fizjoterapeutów wobec dzieci upośledzonych umysłowo

The level of anxiety and the attitudes of physiotherapists towards mentally disabled children

Zbigniew Śliwiński^{1,2,3(A,D,G)} Justyna Wójcik^{1(B,C,E)}, Małgorzata Starczyńska^{1(C,G)},
Zofia Śliwińska^{3(D,E,F)}

¹Institut Fizjoterapii, Wydział Nauk o Zdrowiu Uniwersytet Jana Kochanowskiego w Kielcach, Polska

²Wydział Nauk o Zdrowiu Uniwersytet Medyczny we Wrocławiu, Polska

³Stacjonarny Ośrodek Rehabilitacji WS SP ZOZ w Zgorzelcu, Polska

Streszczenie:

Cel.

Celem pracy jest analiza postaw fizjoterapeutów wobec dzieci upośledzonych umysłowo oraz zbadanie tendencji wpływu postawy, jaki prezentuje badana grupa na poziom lęku.

Metoda.

Badaniu poddano 67 osób, w tym 37 studentów kierunku fizjoterapia oraz 30 fizjoterapeutów pracujących w placówkach specjalnych. Grupy poproszono o wypełnienie Kwestionariusza ISCL, który określa poziom lęku jako stanu i lęku jako cechy oraz autorskiej ankiety Skali Postaw Fizjoterapeutów Wobec Dzieci Upośledzonych Umysłowo.

Wyniki.

Badane grupy prezentują pozytywne postawy wobec dzieci upośledzonych umysłowo. Z badań wynika, iż bardziej pozytywne postawy wobec dzieci upośledzonych umysłowo w porównywanych grupach prezentują fizjoterapeuci pracujący w placówkach specjalnych. Natomiast wyższy poziom lęku-stanu wykazują studenci kierunku fizjoterapia.

Wnioski.

Lęk może wpływać na postawy fizjoterapeutów wobec dzieci upośledzonych umysłowo. Można przypuszczać iż, im wyższy wynik w ocenie pozytywnej postawy wobec dzieci upośledzonych umysłowo, tym niższy poziom lęku wśród fizjoterapeutów i studentów fizjoterapii.

Słowa kluczowe:

lęk, postawa, upośledzenie umysłowe, fizjoterapeuta

Abstract

Aim:

The aim of this paper is to analyse the attitudes of physiotherapists towards mentally disabled children and to analyse the influence of their attitudes on their anxiety level.

Method:

The study comprised 67 respondents; 37 students of physiotherapy and 30 physiotherapists who work in special care centres. Both research groups were asked to fill out an STAI Questionnaire which determines the level of anxiety as a state and anxiety as a trait, as well as author's original questionnaire (Scale of Attitudes of Physiotherapists Towards Mentally Disabled Children).

Results:

Both research groups present positive attitudes towards mentally disabled children. The research indicates that a more positive attitude towards mentally disabled children is presented by physiotherapists who work in special care centres, as compared to the other research group. A higher level of anxiety as a state is experienced by the students of physiotherapy.

Conclusions:

Anxiety may influence the attitudes of physiotherapists toward mentally disabled children. It may be inferred that the higher the score of assessment of positive attitude towards mentally disabled children, the lower the level of anxiety in physiotherapists and students of physiotherapy.

Key words:

anxiety, attitude, mental disability, physiotherapist

Theory

Anxiety as a state and anxiety as a trait

Available research on the subject defines a differentiation between anxiety understood as a temporary state of an individual, determined by the outside situation and anxiety as a relatively permanent personality trait [1].

Anxiety (A-State), after Spielberger, is characterised by subjectively perceived tension and apprehension, accompanied by excitation of the autonomic nervous system. This construct is highly changeable under the influence of external threatening factors. Anxiety understood as a trait (A-Trait) signifies an acquired behavioural disposition which makes a person susceptible to perceive an objectively harmless situation (in a broad sense) as threatening and to respond with disproportionat anxiety in relation to the actual level of danger. This form of anxiety is highly stable [2].

According to Spielberger [3], the mutual relation between anxiety as a trait and anxiety as a state is of the highest importance. Individuals with high level of anxiety as a trait, in comparison to individuals with low such levels, do not experience a higher level of anxiety as a state; they would still react through anxiety in endangering situation. The research results seem to demonstrate, however, that regardless of the situation, a higher A-Trait indicates a higher A-State.

Attitude as psychological construct

Mika [4] distinguishes three groups of definitions of attitude: definitions stemming from behaviourism or psychology of learning, definitions stemming from sociological thesis emphasising the relation of the attitude bearer to the subject and definitions based on cognitive concepts existing in psychology.

In psychological publications the definition developed by Aronson, Wilson, Akert [5 p. 313] is most commonly used: attitude (...) is a permanent assessment (positive or negative) of people, objects and ideas. This definition names three components of attitude; the emotional component consists of emotional reactions to the attitude subject, the cognitive component includes thoughts and opinions referring to the properties of the subject and behavioral component involves all the action and behaviour to the attitude subject. This three-ingredient definition is crucial in any attempt to measure attitudes. Indicators of attitude may therefore include questions referring to the experiences of respondents, their beliefs and opinions as well as their interests or declared expectations associated with the studied subject of attitude.

Subject of attitude

Attitude needs a subject. The subject of this paper is mentally disabled child.

A disabled person is a person who is permanently physically

or intellectually limited. The limitations negatively influence the mode of functioning their quality of life, making it difficult to perform daily activities which don't cause any problems for healthy individuals. However, it must be added that a damage to a body does not automatically mean that a person is disabled. Disability means that an individual is likely to experience difficulties in future life. This disposition means a physical and intellectual damage of a body which may be seen as a factor increasing the risk of being dysfunctional. Dysfunction signifies the restriction of external activity of a disabled individual [6].

Definition of a mental disability by WHO: significant impairment of a general level of intellectual functioning and difficulties in adjusting behaviour occurring before the age of eighteen [7 p. 221].

Mental impairment is diagnosed when:

- The level of cognitive and orientation processes as well as intellectual and executive processes is noticeably below the average,
- The level of maturity and the rate of information and skill acquisition are lower than in the peers brought up in a similar environment [8].

From the epidemiologic point of view, the primary cause of disability of children and adolescents is mental impairment; it constitutes 60 to 70 per cent of the whole disabled population in Poland [9].

Material

The research procedure presented is of precursory nature. One of the implemented tools is a preliminary version of questionnaire based on full psychological questionnaires. It had been decided that the analysis is to be conducted in a short version as an introduction to possible future complete correlative study.

Aim

The research aimed at analysing the relationship between anxiety and the attitude of physiotherapists toward mentally disabled children. The comparison of results of both researched groups was also to be conducted.

Description of studied group

The studies comprised 67 participants, including 37 students of physiotherapy and 30 physiotherapists who work in special care centres. Over 70 per cent of the respondents were females and persons at the age 20 to 27.

The research comprised 67 respondents aged 20-35. Most of them were 20-23 years of age (33 subjects) which makes up 49.3% of the group. The respondents aged 24-27 (20 subjects)

Table 1. Distribution of number regarding the age of respondents, students of physiotherapy, physiotherapists working in special care centres

Age	f frequency	p per cent
20-23	33	49,3%
24-27	20	29,9%
28-31	6	8,9%
32-35	8	11,9%
Total	67	100%

make up 29.9% of the group; 32-35 year olds (8 respondents) constituted 11.9% of the group. The smallest respondent group included 28-31 year olds (6 persons), which was 8,9% of the whole group.

Method

The studies of the influence of anxiety level on the attitude of students of physiotherapy and physiotherapists who work in special care centres for mentally disabled children were conducted using two research tools. The study used an anxiety questionnaire and Spielberger's STAI questionnaire (1983 Polish version titled Inwentarz Stanu i Cechy Lęku – ISCL), as well as original author's questionnaire which tests physiotherapists attitudes to mentally disabled children created on the basis of A.E. Sękowski's Skala Postaw Wobec Osób Niepełnosprawnych.

Description of measuring tools

STAI Questionnaire

It is an auxiliary tool designed to help asses temporary state of anxiety dependant on the external situation as well as a relatively stable anxiety as an individual personality trait.

The questionnaire consists of two sub scales: X-1 to assess anxiety as a state and X-2 to measure anxiety as a trait. Each part comprises 20 items, to which the respondent provides answers on a category scale from 1 to 4 (definitely no; rather no; rather yes; definitely yes or: almost never; seldom; frequently; almost always).

STAI can be used to study both individuals and groups. It may also be applied in screening or experimental tests where it is important to record changes of anxiety.

The results on each scale may vary between 20 points (low anxiety) to 80 points (high anxiety). With the help of the answer key the result of each test can then be calculated. Original version of the test is a professional psychometric tool

used in psychological diagnosis, accessible to psychologists only.

Scale of Attitudes of Physiotherapists Towards Mentally Disabled Children

The outcome Scale of Attitudes Towards disabled Persons by A.E. Sękowski consists of 30 statements. 15 of them are “positive” statements where similarity of disabled persons and non-disabled persons is emphasized [10]. The other 15 statements are “negative”, emphasising the limitations caused by the disability [11]. Using this tool, the questionnaire testing attitudes of physiotherapists toward mentally disabled children was created. The original version of the questionnaire has 34 statements referring to mentally impaired persons. The respondents are to choose one of 6 categorised answers: from -3 to +3 (definitely disagree; disagree; rather disagree; rather agree; agree; definitely agree).

Study procedure

To verify the selected theses, it had been decided to establish a statistical set or a representative group. Due to limited number of respondents there was random selection in this preliminary research.

The intensity of selected variables (anxiety, attitude) among students of physiotherapy at Jan Kochanowski Kielce University, Department of Health Physiotherapy Faculty was measured. Students were given 50 questionnaire sheets with STAI questionnaire and a questionnaire to assess the attitude of physiotherapists toward mentally disabled children.

For the purpose of further analysis 37 correctly filled questionnaires were considered. The respondents were professionally active physiotherapists working with disabled children in special care centres. There were 35 questionnaires handed out, however, for the purpose of further analysis only 30 returned questionnaires were accepted.

Statistical analysis

This paper is based on observation study where the researcher tries not to influence any of the variables, merely recording them and observing the correlations between some sub sets of the variables [12].

The quasi-correlation model adopted by the authors was used to test how the particular variables are interconnected, i.e. anxiety level and the attitude of physiotherapists and students of physiotherapy to disabled children. Because of the mode of the preliminary research, the changeability of particular variables was not verified.

The study results referring to attitudes and anxiety level were analysed with the following statistical measures:

$$\bar{x} = \frac{\sum_{i=1}^n x_i}{n}$$

\bar{x} – arithmetical mean

\sum – sum of results in given population (varied between $i=1$ to $i=n$)

n – sample size

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{(n-1)}}$$

s – standard deviation

\bar{x} – arithmetical mean

n – sample size

Table 2. Results on Scale of Attitude Toward Mentally Disabled Children expressed by arithmetical mean and standard deviation

Research group	Attitude scale	
	\bar{x}	s
Physiotherapy students	159.6	24.7
Physiotherapists working at special care centres	171.8	17.3
Total	165.7	22.4

The result table implies that more positive attitude to mentally disabled children is presented by physiotherapists who work at special care centres; the attitude in this group equalled 171.8 point on average, with the standard deviation of 17.3. A lower score is presented by the students of physiotherapy; the mean attitude equalled 159.6 points, with the standard deviation of 24.7. The arithmetical mean of the studied groups was 165.7 points, with the standard deviation of 22.4.

To summarise, the research groups show significant differences of attitudes toward mentally disabled children and are recorded in different ranges. However, both groups present positive attitude to mentally disabled children.

The data presented in the table indicates that the highest level of anxiety as a state is experienced by the students of physiotherapy;

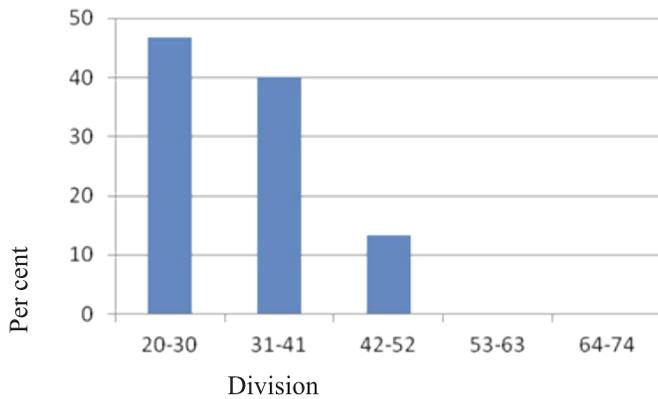


Fig. 1. Graphic representation of number distribution according to Attitude Scale for physiotherapy students

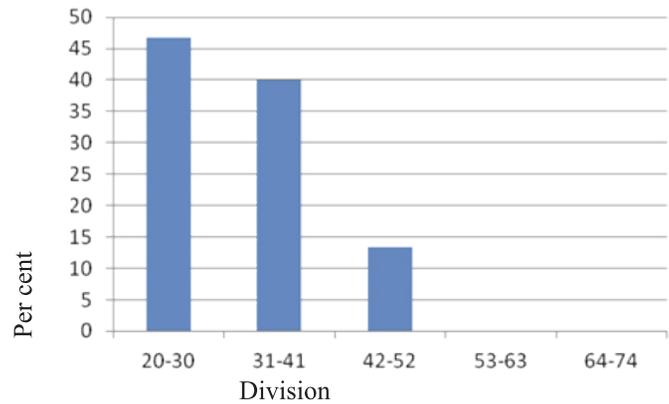


Fig.2. Graphic representation of number distribution according to Attitude Scale for physiotherapists working at special care centres

Table 3. Study results in State and Trait Anxiety Inventory expressed by arithmetical mean and standard deviation

Study Group	L-S/A-S		L-C/A-T	
	x	s	x	s
Physiotherapy students	35.1	7.5	39.6	8.1
Physiotherapists working at special facilities	32.7	6.2	35.2	6.0
Razem/Total	33.9	7.0	37.4	7.6

A-S – anxiety as state
 A-T – anxiety as characteristics
 s – standard deviation
 x – arithmetical mean

the mean value in this group equalled at 35.1 points. A lower level of anxiety as a state is experienced by physiotherapists working in special care centres; the mean value was recorded at the level of 32.7 points.

The differences of the level of anxiety as a state between both research groups are not significant, both of them are actually in the same range. All research groups experience the average level of anxiety as a state; the overall mean is recorded at the level of 33.9 points.

The highest level of anxiety as a trait in the compared research groups is recorded for the students of physiotherapy; the mean value was recorded at 39.6 points. The lowest level of anxiety as a trait is recorded for the employees of special care institutions; the mean value in this group was recorded at the level of 35.2 points.

The differences of the level of anxiety as a trait between both research groups are not significant, both of them are actually in the same range. All research groups experience the average level of the anxiety; the overall mean is recorded at the level of 37.4 points.

The research groups experience a higher average level of anxiety

as a trait (37.4 points), as compared to the average level of anxiety as a state (33.9 points).

To summarise, the respondents in stressful situations react at the average level of anxiety as a trait; anxiety as a state is also experienced by respondents at an average level during the test.

The analysis of the results obtained indicates that there is a correlation between the levels of anxiety as a trait and a state; respondents with a high level of anxiety as a trait also experience a stronger state of anxiety.

The analysis of results of the anxiety level and attitudes towards children with disabilities, a certain correlation may be noticed: the higher the level of anxiety, the less positive the attitudes towards children with mental disabilities.

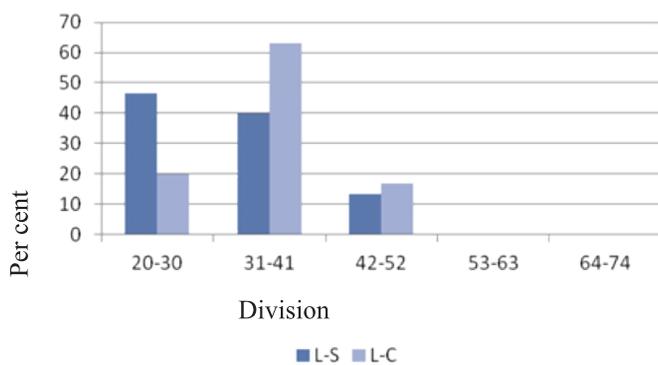


Fig. 3. Graphic representation of number distribution according to Attitude Scale for the whole research group

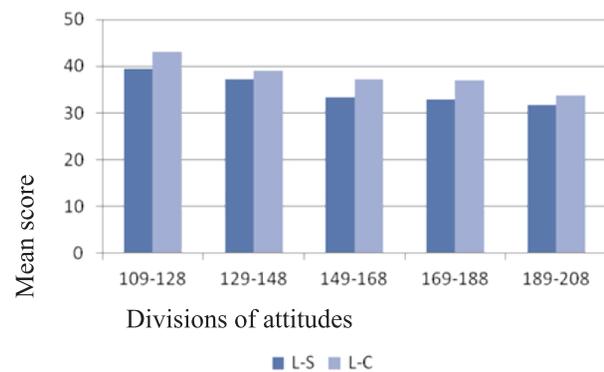


Fig 4. Graphic representation of the correlation between anxiety as a trait and as a state and the attitudes towards children with mental disabilities

Results analysis

The research groups present positive attitudes towards children with mental disabilities. All respondents seem to have sufficient knowledge on the subject of disability and are capable of objective assessment of the opportunities and effects rehabilitation has on the lives of the disabled. Over a half of the respondents are found in the 169-188 range of the Attitude Scale with the highest score of 198, and the lowest of 109. Only 5 of the respondents are found in the 109-128 range which signifies the "rather positive" attitudes towards children with mental disabilities.

The analysis of the data obtained indicates that in the compared research groups, physiotherapists working in special care institutions present more positive attitudes toward the mentally disabled children. The mean value of attitude in this group totals at 171.8. The mean value of the same characteristics recorded for the physiotherapy students is 12.2 points lower. The compared research groups differ in the level of kindness towards mentally disabled children; their mean values are not in the same range. To summarise, despite the differences in the results obtained, both groups show a positive attitude towards the mentally disabled children.

The research also determined 2 levels of anxiety, first defined as a state and the other defined as a trait in the above mentioned groups. Anxiety defined as a state changes in time. The research shows

that a higher level of anxiety as a state is experienced by the students of physiotherapy. 54.1 per cent of the students obtained test results indicating medium level of anxiety as a state; as many as 16.2 per cent experience the level defined as "higher". These results can be compared with over 80 percent of physiotherapists working in special care centres who obtained the result indicating a medium and low level of anxiety as a state. None of the research groups included any respondents experiencing a very high level of anxiety as a state; in a group of students one respondent obtained results indicating a high level of anxiety as a state. The research shows that almost half of the respondents experience the average level of the anxiety as a state, the intensity of which varies under the dynamically changing situation. The second biggest was the range of 20-30 points indicating a low level of anxiety as a state. The result in this range was obtained by 35.8 percent of the respondents. The mean result of the students for anxiety as a state equalled 35.1 points; on the other hand physiotherapists who work with people with mental disabilities obtained a mean result of 32.7 points.

Discussion

After the conduct of the research and the analysis of the results obtained, a certain trend may be noticed; the conclusion is that anxiety may affect the attitudes of physiotherapists to mentally disabled children.

Due to the uniqueness of the researched subject matter, the comparison of the results has proven extremely difficult. Currently available research does not provide any other studies on the attitudes of physiotherapists and correlated levels of anxiety. However, the result of similar research are available.

This paper presents the analysis of the attitude construct defined as the tendency to respond in a socially specific manner [13]. Attitudes towards people with disabilities undergo dynamic changes with the development of civilisation; they are also determined by the current philosophical and social views, values, and cultural level of a given system [14].

A specific such form is a parental attitude towards children with disabilities. The families with a disabled child may experience difficulties in social life, including integration disorder, isolation, poor upbringing conditions [15].

The research of J. Sowa and F. Wojciechowski [16], has indicated that families with a disabled child often have to deal with the negative parental attitudes. Parents might tend to feel superior and to distance themselves, while at the same time they feel helpless.

In order to identify protective factors, the attitudes of mothers with children with low level of disability were examined, in correlation with their family situation. Parental attitudes were better in the full family systems with strong emotional ties. The relationship must be strong enough to outweigh the potential risk of social rejection, both of the child and the whole family [17].

In both examples presented the correlation of anxiety and attitude is apparent. Attitude towards their disabled child depends on social acceptance; the fear of rejection may determine the deterioration of the relationship and worsening of the attitude towards the disabled child.

The second key aspect of this publication is the subject of the issues associated with the fear of physiotherapists. Despite the scarce publications on the subject, it is worth noting that more and more empirical research becomes available, focused on analysing the emotional situation of this professional group.

People who professionally help others may gradually feel overloaded; this feeling may then transform into the professional burnout [18]. Health-care practitioners seem to be particularly vulnerable to this process as they might experience frustration resulting from the chronically poor condition of the patient combined with communication difficulties [19]. In this context, it may be assumed that physiotherapists working with disabled children should be included in the so-called "Risk Group".

Chronic professional stress may cause a psychological response in the form of physical ailments including insomnia, hypertension [20] or emotional problems as depression, cynicism or anxiety [18].

The overloading task of helping patients, carries the risk of physical and emotional exhaustion; this in turn can cause feelings of incompetence and reduction of effectiveness [21].

This is a particularly interesting aspect of working with a disabled child. Deteriorating mental state of a physiotherapist, increased depersonalisation of the patients and increased cynicism when performing the professional tasks may contribute to the overall deterioration of attitudes towards disabled people. Moreover, lack of belief in their own ability to help may lead to the experience of anxiety associated with their own professional limitations. The burnout syndrome among physiotherapists working with disabled children may considerably affect their attitudes towards the pupils in their care; it can also determine the level of anxiety associated with the conduct of professional duties.

However, the research involving Polish physiotherapists [20] indicates that this professional group experiences a lower level of psychological distress and a greater level of job satisfaction, compared with other professions, including nurses, doctors and teachers working with children with special educational needs. Moreover, physiotherapists working with children have a greater sense of self-efficiency and satisfaction with their own achievements; this may act as a protective factor against the professional burnout [22, after: 20].

The research presented in this paper is observational; the researcher do not interfere with the occurring phenomena. It is not therefore possible to assess the direction of the impact (fear and attitude). However, it is a prerequisite to explore these issues in further empirical research.

Conclusions

1. The students of physiotherapy experience a moderate level of anxiety, defined as both a state and a trait.
2. Physiotherapists working in special care centres experience a low levels of anxiety as a condition but a moderate level of anxiety as a trait.
3. The respondents of both groups, the students of physiotherapy and the physiotherapists working in special care centres, have a positive attitude towards children with mental disabilities.
4. The comparison of the result ranges associated with the attitudes indicates slightly higher scores for the physiotherapists working in special care institutions than for the students of physiotherapy.
5. Anxiety can affect the attitudes of physiotherapists towards mentally disabled children. It can be assumed that, the higher the score in the Attitude Scale, the lower the result in the STAI Questionnaire.
6. The research procedure may become inspiration for a deeper research of similar issues and further studies verifying the hypothesis that anxiety as a state or as a trait affects the attitudes of physiotherapists and influences their work with mentally disabled children.

adres do korespondencji / corresponding author



Zbigniew Śliwiński,

59-900 Zgorzelec, ul. Św. Jana 26E,

e-mail: dr_sliwinski@post.pl

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