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Youth Physical Activity Assessment

EF310-01-Unit 3

Laurie Peterson

Kaplan University

YOUTH PHYSICAL ACTIVITY ASSESSMENT 2

One in every three American kids and teens are overweight or obese. Childhood obesity is contributing to children developing diseases that previously were not seen until adulthood. The good news is that this growing epidemic can be stopped. Educating children on living a healthy active lifestyle is where it begins. It is important for children to develop healthy habits in regards to nutrition and physical activity early in life; this will lead to lifelong benefits. (AHA, 2011)

According to the American Heart Association inactive children are likely to become inactive adults and an obese child has an 80% chance of staying obese their entire life. (AHA, 2011) Understanding the severity of these facts reveals the importance of physical activity for children and youth. Concerns for the fitness of children and youth have led to the development of organizations such as the President’s Council on Youth Fitness and the American Association for Health, Physical Education, and Recreation. With the development of these organizations came Youth Fitness Test. (Howley & Franks, 2007. Pg. 273)

There are two major physical fitness tests that are used for children and youth these are the Fitness, muscular strength and endurance, and flexibility. (Howley & Franks, 2007. Pg. 274) This paper will reflect the results of the President’s Council fitness test that was performed on a 13 year old male named Riley.

**Health History by parent or guardian**

Prior to beginning the fitness test I obtained permission from Riley’s mother to perform the testing. A PAR-Q Questionnaire was completed by Riley’s mother and all questions were answered with “no”, which indicates that there are currently no cardiac, respiratory, or bone/joint problems that would prevent us from performing the fitness test. (Howley & Franks, 2007. Pg. 23)

The next form that was completed was the Health Status Questionnaire. (Howley & Franks, 2007. Pg. 26) The following is a brief summary from this form. Riley’s birthday is November 23, 1998. He is 5’ 5” and weighs 165 pounds. He has no known cardiac disorders. Additional Health Issues revealed that he does not

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have diabetes, asthma, or any joint problems but does take prescription medications. Riley exhibits no risk factors for Coronary Heart Disease. Riley has a medical history of Pervasive Developmental Disorder, Bipolar Disorder, Attention Deficit Hyperactivity Disorder (ADHD), and Crohn’s Disease.

Riley although a very outgoing child is very sedentary and does not engage in much physical activity at this time. Riley’s mother mentioned that this lack of physical activity has increased over the past year. In previous years Riley has participated in activities such as wrestling, basketball, and little league baseball. Currently Riley spends 20 minutes a day in physical activity during recess at school. Most recently Riley has been spending approximately 1 hour on Saturdays at the gym, but does not have any formal routine that he performs. Riley states that he usually walks on the treadmill and uses the elliptical and plays basketball with his brother.

Riley enjoys coming to the gym, his mother would like him to have a program to follow. Riley’s mother expressed he has struggled with weight gain for the past several years and has become increasingly more sluggish and inactive. Although Riley did not express what his specific goals for exercise were his mother would like to see him more physically active to help keep his weight under control.

**Risk Factor Assessment:**

Riley does not exhibit any of the risk factors for coronary heart disease. According to his mother Riley’s blood pressure and blood cholesterol levels are within the normal range. There is no family history of coronary heart disease. Riley is not overly physically active but his mother feels that he does get at least 20 minutes of exercise 3x a week.

**Medications:**

The following is a list of medication that Riley is currently taking. All medications are taken as prescribed by his physician:

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**Zypreza:** Riley has been taken this medication daily for approximately 9 months. Zypreza is used to treat the symptoms of psychotic conditions such as schizophrenia and Bipolar disorder. Side effects of this medication include weight gain, increased appetite, drowsiness, weakness, and back and joint pain. (Drugs.com 2012. Zypreza) Riley’s mother reports that there has been an increase in his appetite and his weight. He does show signs of drowsiness after taking this medication. Riley does not experience back or joint pain side effects. There are no known contraindications for exercise while taken this medication.

**Vyvanse:** Riley has been taken this medication daily for approximately 5 years. Vyvanse is a central nervous system stimulant. It is a medication used to treat attention deficit hyperactivity disorder. (Drugs.com, 2012. Vyvanse) There are no known contraindications for exercise while taken this medication.

**Lamictal:** Riley has been taken this medication daily for approximately 9 months. Lamictal is used to delay mood episodes in individuals with Bipolar disorder. (Drugs.com, 2012. Lamictal) There are no known contraindications for exercise while taken this medication.

**Pentasa:** Riley has been taken this medication daily for approximately 10 years. Pentasa affects a substance in the body that causes inflammation, tissue damage, and diarrhea. It is used to treat ulcerative colitis, proctitis, and proctosigmoiditis. A side effect of pentasa is a tired feeling. (Drugs.com, 2012. Pentasa) There are no known contraindications for exercise while taken this medication.

**Physical Fitness Test:**

I choose to use the President’s Council on Physical Fitness and Sports Test. This physical fitness test consists of five activities that measure muscular strength/endurance, cardio-respiratory endurance, speed, agility, and flexibility. (Howley & Franks, 2007. Pg. 274) This test seemed to be the best fit for Riley because it is one he has participated in a school and he is familiar with. Because of Riley’s developmental delays it was important to do a test that he understood and was comfortable performing.

**Endurance Run/Walk**

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This one mile run/walk activity measures heart/lung endurance. Prior to beginning the one mile run Riley warmed up by walking briskly for 10 minutes. I explained that he did not have to run the whole time he could walk when needed but the goal was to complete the mile in as short a time possible. The mile run test was performed on a treadmill. Riley began at a nice pace but began to struggle within 5 minutes. I encouraged him to slow down and walk for a short period. Riley completed the mile in a time of 14.37 minutes; which is in the 5th percentile. (Presidentschallenge.com, 2012)

**Pull-ups (or Right Angle Push-ups or Flexed-Arm Hang0:**

This activity measures upper body strength and endurance. Riley was unable to pull himself so that his chin cleared the bar. He attempted with both an overhand grasp and an underhand grip. Riley then attempted to do a right angle push-up and was also not able to complete with proper form. He was able to complete 14 modified (girls) push-ups with good form. Finally, because he was unable to do push-ups with the correct form for the test he then attempted the Flexed-arm Hang Test. Riley used a bench to stand on to pull himself up until his chin cleared the bar and using an overhead grasp he was able to hang with proper form for 8 seconds; which is in the 20th percentile. (Presidentschallenge.com, 2012)

**Shuttle Run:**

This activity measures speed and agility. Two lines were tapped on the gym floor 30 feet apart. Two cones were placed behind one of the lines. I demonstrated how the test would be performed, and reminded Riley that the cones could not be thrown across the line. Riley ran from the first line to the second line picked up one cone and ran it back to the first line placing the cone behind that line and repeated this sequence with the second cone. Riley was able to complete this test in 13.3 seconds; which is in the 5th percentile. (Presidentschallenge.com, 2012)

**Curl-ups (partial Curl-ups):**

The purpose of this activity is to measure abdominal strength and endurance. Riley lay on the floor with his feet approximately 12 inches from his buttocks and with me holding his feet. With his arms crossed over his chest, Riley curled his body up touching his elbows to his knee. A timer was set for 1 minute and Riley was able to complete 26 curl-ups with proper form: which is in the 5rh percentile. (Presidentschallenge.com, 2012)

**V-sit Reach (or Sit and Reach):**

This activity measures flexibility of the lower back and hamstrings. A sit and reach box was used for this activity. Riley first removed his shoes and sat on the floor with his knees fully extended, feet were shoulder width apart and the soles of the feet were flat against the end of the box. Riley’s placed his hands on the top of the box with his palms down. I reminded him that his legs needed to stay flat against the floor and he would reach as far as he could. Riley did three warm up reaches which measured 10 cm, 13 cm, and 16 cm. On the fourth try he was able to reach a distance of 21 cm which is in the 25th percentile (Presidentschallenge.com, 2012)

After Riley had completed all activities I complemented him on a job well done. He asked me how well he did. Although he scored low on most activities I did not want to discourage him and did not tell him his percentile placement. I once again reminded him of the importance of staying physically active and explained that the more active he stays the easier each of these activities will become. I congratulated him on a job well done and I could see that he was truly beaming with pride for completing the test.

**Health and Lifestyle Related Behaviors:**

Riley is a very happy, talkative, and outgoing young man. His mother states that due to his diagnosis of PPD; which is a disorder on the autism spectrum, he struggles socially with children his own age. He is in a special emotional support classroom in school. He does not participate in any organized sports. His mother shared with me that in years past he wanted to play sports such as basketball and baseball; but as he got older these organized sports that would be played through the school system became too competitive for him. The other children on the teams would pick on him and the coaches never played him; Riley became very

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discouraged and would no longer participate. Unfortunately, at 13 Riley is too old to participate in the non-competitive sports sponsored by the YMCA. Riley and his family now have a membership at the YMCA, which Riley is really enjoying.

**Body Composition:**

Riley is 65 inches tall and weighs 165 pounds this gives him a BMI index of 27.5 placing him in the 95 percentile and classified as obese. The weight range for some of Riley’s height and age is 96-136 pounds. It is very common for teens to gain weight quickly and see their BMI go up during puberty. (Kidshealth.org, 2012)

Riley’s waist measurement is 35 inches and his hip measurement is 39. His waist-hip ratio is 0.89 with a score of 19 putting him in the high risk category.

**Nutrition:**

Riley’s and his mother kept a food log to show me what he eats on an average day. When using the Super Tracker at Choosemyplate.com to analyze Riley’s diet, I was able to determine how many calories he consumes in an average day. Riley on average consumes 2120 calories. The biggest problem with Riley’s diet is he is consuming too many empty calories. On an average day Riley is consuming 709 empty calories. Because of the types of food Riley is consuming his sodium intake at 3075 mg is over the recommended 2300mg per day and his saturated fat level was at 36 g which is over the recommended 33g. Riley’s vegetable consumption was 0 and the only form of fruit intake was in the form of juice. Protein levels were also over the recommended 7 oz. per day at 10 oz. (Choosemyplate.com, 2012 Super Tracker)

Riley reports he does not like vegetables or not very many fruits. His mother has tried many times to get him to try different vegetables with no success. Because of Riley’s disorder food becomes a trigger for behavior problems. Riley wants to snack all the time according to his mother and is so picky with what he will and will not eat which makes it very difficult to keep him on a diet.

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Riley’s mother expressed that she would like to see if he could lose 10-15 pounds. I encouraged her to speak with his physician about his weight loss. I recommended that they visit the choosemyplate.com to help with starting a healthy diet plan. Using choosemyplate.com Riley’s caloric intake to help reach his goal weight of 150 pounds is 3000 calories a day. It is important to remember that with this caloric intake 60 minutes of moderate exercise per day is needed. I made recommendation such as replacing fruit juice with real fruit, making healthier snack chooses decreasing the amounts of processed foods being consumed. I suggested his mother try hiding some vegetables in foods. I explained how I will put some vegetables such as zucchini and squash into the food processor and mix them into spaghetti sauce. I also recommended that if there are some fruits that Riley will eat I would focus on them and have them on hand for a snack. I encouraged Riley to continue to try to eat vegetables and reminded him of the importance of eating a balanced diet. Riley was very attentive and quite excited as we reviewed the ChooseMyPlate website. Riley does have a very positive attitude about trying to develop a healthier lifestyle.

**Motivational Strategies:**

Riley can be very hard to get motivated especially when he has his mind set to do something else like play his games or watch a TV show. Riley can be motivated to be active when he is at the YMCA, but his mother says it is almost impossible to get him motivated when he is at home. The one thing Riley does like to do is play games and have the attention of other people. Riley really enjoys going to the YMCA and when he is there he receives the attention of many including myself. I have noticed that if you talk to Riley while he is walking on the treadmill he will walk as long as someone will continue to listen to him talk. He will also increase his speed as the people around him increase theirs. I believe that Riley can stay motivated to be physically active with individualized attention. I suggested that his mother continue a routine of going to the YMCA, it seems to be the most successful way of motivating Riley because it is fun for him and he receives attention and praise from other members and this motivates him. The best way to motivate children to exercise is my keeping it fun and doing activities they enjoy.

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**Evaluation and Recommendations:**

Riley is at risk for many health related diseases if his weight is not brought under control. The best way of doing this is with a healthy diet and physical activity. It is important that Riley receives at least 60 minutes of moderate intensity activities most days if not every day of the week. If he is unable to get 60 minutes of continuous exercise it can be accumulated in 15 minute increments throughout the day. It is also recommended that he avoids extended inactivity for 2 or more hours. Riley needs to follow an exercise program that consists of cardiorespiratory endurance, muscular endurance, muscular strength, flexibility. (Howley & Franks, 2007. Pg. 276)

**Riley’s Exercise Program:**

YMCA Workout 3 times a week

**Warm up:** 10 minutes of casual basketball (Riley enjoys dribbling the basketball up and down the court and shooting, this is a good fun way for him to get warmed up before going to the cardio room)

**Cardiorespiratory endurance:** 30 minutes treadmill or elliptical: Interval training: 2 minutes at 3.5 RPM 30 seconds at 4.5 RPM

**Muscular Endurance:** Pushups: 3 sets 10-12 reps

Assisted Pull ups 3 sets 10-12 reps

Abdominal Crunches 3 sets 15-20 reps

Stability ball Crunches 3 sets 15-20 reps

**Muscular Strength:** Bicep curl 3 sets 10-12 reps 8-10 lbs.

Triceps extension 3 sets 10-12 reps 8-10 lbs.

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Military Press 3 sets 10-12 reps 35 lb. bar

Chest Press 3 sets 10-12 reps 35 lb. bar

Squats 3 sets 10-12 reps 15-20 lbs.

Leg press 3 sets 10-12 reps 65-70 lbs.

**Flexibility:** 5-10 minutes using the SRS machine. (This machine allows you to stretch all muscle groups safely).

**Home Exercise:**

Riley will be limited to no more than ½ hour of game playing/TV watching without a 15 minute break. Riley’s family lives in the country with no children nearby for Riley to go outside and play with. Riley needs to have activities that are fun that he can do alone or with his parents. He can do a variety of different activities such as: His mom will time him to see how many laps around the outside of the house he can do in 15 minutes. Riley likes to be challenged I suggested making a chart to graph how many laps he can make and encourage him to try and beat his previous number. For other activities at home I recommended that Riley do exercises such as sit-ups, pushups, jumping jacks during commercials.

Riley loves to be praised for a job well done. I think it is important to show Riley much praise, it is something that will keep him motivated. Riley is a very visual child and charting his success will also help to keep him motivated. I believe it is important to keep Riley motivated and to keep introducing new ways to be physically active. Due to Riley’s diagnosis and the medication he takes he will always be challenged with issues of weight. I think that with continual motivation Riley will make physical activity a part of his everyday life.

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