

Flex Therapist CEUs

Prader Willi: Therapy Considerations

Learning by observation and learning by doing in Prader-Willi syndrome

1. Observing another person performing a complex action and solving a problem:

- A. Accelerates the observer's acquisition of the same action.
 - B. Limits the time-consuming process of learning by trial and error.
 - C. Reduces the practice needed to learn the skill.
 - D. All of the above
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2. The main result of the present study showed a specific PWS deficit in learning by observation.

- A. True
 - B. False
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3. PWS individuals were as efficient as typically developing children in all of the following, except for:

- A. Observing the experimenter detect a sequence and then reproducing it (OBS1)
 - B. Reproducing the observed sequence after observational training (OBS2)
 - C. Detecting a sequence by doing a trial and error task (TE1)
 - D. Detecting a sequence by doing a different sequence of a trial and error task (TE2)
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4. PWS individuals display difficulty in recognizing and interpreting social cues and situations on the Social Attribution Task that measures the specific abilities necessary for interpreting social information.

- A. True
 - B. False
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5. In a functional neuroimaging study, the typical difficulties in interacting with peers and understanding social environment displayed by PWS individuals are related to the perfusion abnormalities of the:

- A. Posterior cingulum and the cingulate sulcus
- B. Anterior cingulum and the cingulate gyrus
- C. Hippocampus and the posterior cingulum

D. Parahippocampal gyrus and the cingulate gyrus

6. Results of this study complement the indication that the visuo-spatial domain is a weak point of PWS individuals.

- A. True**
 - B. False**
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7. Despite the specific deficit in _____ of PWS participants, no difference in imitative errors was found among the groups.

- A. Detecting sequences**
 - B. Observational learning**
 - C. Trial and error learning**
 - D. PWS participants were found to not have specific deficits when compared to the other groups**
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8. In the automatization phases, which group displayed slowed down automatization times?

- A. Williams syndrome participants**
 - B. Prader-Willi syndrome participants**
 - C. Both WS and PWS participants**
 - D. Neither WS nor PWS participants displayed slowed down automatization times**
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9. Automatizing skills are mainly linked to the functions of the:

- A. Primary motor cortex**
 - B. Reticular activating system**
 - C. Cerebellum and basal ganglia**
 - D. Cerebrum**
-

10. The performance of PWS individuals improved dramatically in OBS2, indicating the beneficial practice effect on the ability to learn by observation, notably, the production of actions has a strong impact on action memory, so producing actions helps remember them.

- A. True**
 - B. False**
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11. PWS individuals have language difficulties and it was shown that their poor performances in OBS1 were caused by a failure to understand the verbal instructions.

- A. True**
 - B. False**
-

Weight control and behavior rehabilitation in a patient suffering from Prader Willi syndrome

12. All of the following are key symptoms secondary to alterations in hypothalamic function, except for:

- A. Hyperphagia**
 - B. Alteration of sleep-wake cycle**
 - C. Decreased pain threshold**
 - D. Dysfunction of body temperature regulation**
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13. Previous studies have highlighted that patients with PWS often present all of the following in comorbidity, except for:

- A. Mood instability**
 - B. Obsessive compulsive disorder**
 - C. Anxiety disorder**
 - D. Depression**
-

14. All of the following complications are related to the underlying endocrine alterations of those with PWS, except for:

- A. Osteoporosis with fractures**
 - B. Rupture of stomach**
 - C. Secondary hypogonadism disorders**
 - D. Cardiovascular disease**
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15. While under the constant supervision of educators, which of the following were included in the intensive program carried out?

- A. Gymnastics**
 - B. Soccer**
 - C. Swimming**
 - D. Gymnastics, soccer playing, and swimming were all part of the program**
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16. When not participating in the program activities, the patients were encouraged to walk as much as possible to counteract the tendency to gain weight and at the same time to distract them from the compulsive search for food.

- A. True**
 - B. False**
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17. Emphatic therapeutic relationships are necessary in order to support and motivate PWS patients in adhering to rehabilitative programs, the only available treatment preventing potential regressive evolution.

- A. True**
 - B. False**
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Postural adaptations to long-term training in Prader-Willi patients

18. In the adult life of PWS individuals, hypotonia progresses and the progressive effects of obesity on the joints produce a cautious abnormal gait.

- A. True**
 - B. False**
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19. PWS patients present with reduced lean body mass and increased fat to lean mass ratio when compared to:

- A. Lean patients**
 - B. Obese patients**
 - C. Both lean and obese patients**
 - D. Neither lean nor obese patients**
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20. A previous study demonstrated that PWS patients have a poorer balance capacity than their non-genetically obese counterparts, with findings suggesting that strengthening _____ should be given particular consideration within rehabilitation programs.

- A. Ankle flexors / extensors, balance training, and tailored exercises aimed at improving medial-lateral control using hip strategies**
- B. Knee flexors / extensors, balance training, and tailored exercises aimed at improving anterior-posterior control using hip strategies**
- C. Toe flexors / extensors, balance training, and tailored exercises aimed at improving medial-lateral control using hip strategies**

D. Adductor longus flexors / extensors, balance training, and tailored exercises aimed at improving medial-lateral control using hip strategies

21. For PWS, providing an effective and simple home-based training would represent a continuum of the rehabilitation process outside the hospital which appears crucial in all chronic conditions.

- A. True**
 - B. False**
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22. In particular, this study's training focused on:

- A. Ankle flexor and extensor muscle groups**
 - B. Balance exercises**
 - C. Proprioceptive exercises**
 - D. This study focused on ankle flexor and extensor muscle groups. balance exercises, and proprioceptive exercises**
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23. Intensities as low as 30% of the maximum voluntary contraction have proven to be an effective stimulus for strength and function gain.

- A. True**
 - B. False**
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24. It could be speculated that weight loss in addition to specific balance training is mandatory in order to improve balance capacity in PWS.

- A. True**
 - B. False**
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Gait initiation and termination strategies in patients with Prader-Willi syndrome

25. Compared to normal, steady-state walking, the requirements on the neuromuscular system are increased in:

- A. Gait initiation**
 - B. Gait termination**
 - C. Cooperation within the neuromuscular system are increased in both GI and GT**
 - D. Normal, steady-state walking requires increased neuromuscular system cooperation compared to GI and GT**
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26. In the final bipedal standing position, the center of mass lies behind the Center of Pressure and within the base of support.

- A. True**
 - B. False**
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27. Quantitative evidence exists that excessive body weight negatively affects all of the following in the obese and PWS individuals, except for:

- A. Sitting to standing**
 - B. Standing to sitting**
 - C. Walking**
 - D. Quantitative evidence shows that body weight negatively affects sitting to standing, standing to sitting, and walking in obese and PWS individuals**
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28. With respect to the non-genetically obese subjects, results showed a significant reduction of _____ in PWS for gait initiation.

- A. Velocity**
 - B. Center of Pressure length**
 - C. Both velocity and CoP length parameters**
 - D. Neither velocity nor CoP length parameters**
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29. The role of the _____ is fundamental for GI, in fact, these muscles allow the shifting of CoP from one side to the contralateral.

- A. Abductor foot muscles**
 - B. Adductor foot muscles**
 - C. Abductor hip muscles**
 - D. Adductor hip muscles**
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30. As lower normalized values were observed in PWS, it is speculated that reduced muscle strength and motor control in PWS as compared to the non-genetically obese population may have a significant impact on reduction in Center of Pressure length.

- A. True**
 - B. False**
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31. It appears that the combination of high body mass, reduced motor control and muscle strength could account for PWS difficulties in negotiating:

- A. Gait initiation**

- B. Gait termination
 - C. Both GI and GT
 - D. Neither GI nor GT
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Physiological adaptation after a 12-week physical activity program for patients with Prader-Willi syndrome: two case reports

32. There is a positive correlation between higher levels of physical activity and bone density in PWS, making it possible that the increased physical activity due to physical activity program contributed to the improvement of the BMD in the participants.

- A. True
 - B. False
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33. Like nonsyndromic obesity, overweight in PWS is accompanied by an increase in lean mass.

- A. True
 - B. False
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34. Both participants presented improved results for all of the following PRODOWN measured variables, except for:

- A. Upper muscles power
 - B. Square agility
 - C. 20-m displacement speed
 - D. 6-minute test
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35. Besides the control of energy intake, introducing physical activity into the daily routine is the best non-pharmacologic strategy to maintain healthy weight and prevent obesity among PWS individuals.

- A. True
 - B. False
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