



NEURO LINGUISTIC PROGRAMMING AS AN EDUCATIONAL-THERAPEUTIC PROGRAMME: TWO CASE STUDIES

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Abstract:

The neuro-linguistic approach emphasizes man's behaviours as the product of neurological processes within and the experience of the external world outside. When an individual wishes to get into a desired behaviour, Neuro-linguistic Programming helps one to understand one's current situation and gives a road map to the desired state (1). When NLP is applied in sports, mental skill training, contributes to the new desired behaviour in the form of optimal performance in their respective sports. **Objective:** This paper aims to examine a tailor-made NLP intervention to reduce low self-determination, poor emotional maturity, and low motivation among two university women volleyball players. **Method:** This study used a case study approach, and employed NLP techniques such as; collapsing anchoring, and meta-model language patterns, to help two athletes who experienced low self-determination and low motivation and found it emotionally difficult to perform in training and competition, to restructure their dysfunctional thoughts, emotions and memories. **Results:** The intervention showed promising improvement in helping Participant A to be more resilient and Participant B to be higher in motivation. The results obtained from the interview sessions, and through the quantitative analysis showed that the NLP intervention had successfully helped the participants to cope with dysfunctional thoughts and emotional imbalance and to bounce back. **Conclusions:** The NLP-based intervention, has helped the players to be more self-determined, experience much Emotional control and maturity, and increase the level of sports achievement motivation and sports resilience.

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1. Introduction

Richard Bandler and John Grinder in the 1970s, founded a methodology to understand and change human behaviour patterns and named it Neuro-linguistic Programming (2,3). It zeroed in on the subjective experiences of individuals and the art of communication and personal fitness (4). NLP's Prime focus is on individuals' organization of their feelings, thinking, and language towards the desired result (5). Its basic components are neurology, linguistics, and planning. Mental resources (the neurotic section) are enhanced and utilized to the maximum through NLP techniques by having access to the goals-directed verbal element (verbal or lingual section) which facilitates organizing beliefs and values to accomplish getting access to desired results (planning) (6). In short, NLP is a fundamental dynamic between the mind (brain and nerves) and language (speech) and how they affect our bodies and behaviour (programming). In this study two important NLP techniques namely Anchoring and Meta-model were used.

1.1 Anchoring

Anchoring is a Neuro-linguistic Programming that associates an internal response with some environmental or mental trigger so that responses may be immediate (7). Here the stimulus can even be neutral or even out of conscious awareness. The stimulus could be reinforced by recurrent stimuli, which makes them similar to classical conditioning (8). Here already the stimulus and its associated positive desired emotions are anchored to the individual and could be recalled at a specific time when the individual is in an unresourceful state (9). Basic NLP anchoring involves elicitation a strong congruent experience of a desired state while using some notable modalities with its characteristic sub-modalities. The repetition of the stimulus will re-associate and restore the experience of the state (10). The anchors employ the process of association to focus awareness and to re-access cognitive knowledge and internal states which connect experiences together in order to enrich meaning consolidate knowledge and transfer learnings and experiences to other contexts (11).

1.2 Meta Model

Self-reflexive consciousness and metacognition are prime constructs in coaching changes (12), up until now little has been done in the psychology of thinking, reasoning, meaning-making, and decision-making to model the structure and experience of self-reflexive consciousness in order to explain how metacognitive processing actually occurs and how it can be enhanced. The Meta-model explains how our reflexive consciousness creates layers of thoughts and feelings and how it is surrounded by unconscious belief frames that affect our reactions, actions, and behaviours (13). The Meta-model claims that when

individuals receive information about their neuro-linguistic states from the outer world, they feed themselves with more information about that information; layer upon layer of ideas, beliefs, and understandings (14). This repeated layer crystallises into frames of mind, personality patterns meta-programmes or belief systems (15), and emotional systems within responding to both the external stimulus and internal state of mind from subconscious memory and loads one with a flood of emotions (16, 17).

In this model, the structure of client thinking and emotions will be studied by the clients themselves by the trainer asking valid and relevant questions to the participating client, since perception is organized by our deletion, distortion, and generalization (18), which is totally different and unique to others. It is by understanding these processes of deletion, distortion, and generalization, that we can understand our distorted thinking pattern and the corresponding emotions involved in our expressed behaviour.

2. Review of Literature

Research on the athletes' return to the game after the injury reveals the fact that the players experience both adaptive and maladaptive outcomes when they return after the injury. Kaplan (2021) studied the relationship between mental skill training and sports injury anxiety among 179 athletes and concluded that there exists no relationship between the two variables (19). However, Jordan (2008) in his studies has revealed the effect of mental skill training in the rehabilitation process of injured athletes (20). Laura (2012) demonstrated the effectiveness of guided imagery, relaxation techniques, and other stress management strategies would enhance the process of the rehabilitation of the injured athletes. These studies gave a direction for the current case study (21).

3. Methodology

3.1 Participants

Two female volleyball players aged 20 and 21 who were referred by their coach from the university women's volleyball team asking for assistance to address their psychological difficulties during training and competition were participants A and B.

3.2 Selection of Test Items

For the case study of Participant A, the test items used were RSA (Resilience Scale for Athletes) developed by Sara Subhan and Tazvin Ijaz (20), which has 3 dimensions namely self-determination, physical toughness, emotional control, and maturity, and for the case study Participant B, Sports Achievement Motivation Questionnaire, developed by Dr. Kamelesh which contains 20 items with two dimensions namely internal locus of control and external locus of control was used.

3.3 Procedure

The participants A and B referred by the coach were primarily administered a pre-test with Resilience Scale for Athletes and Sports Achievement Motivation Questionnaire respectively. With the results of the pre-test and with the personal interview the individual assessment was made. The individuals' needs were addressed through tailor-made Neuro-linguistic Programming Intervention for successive eight weeks. After the intervention, post-test was administered for participants A and B. Finally, the results of the NLP intervention are analysed.

3.3.1 Case Study of Participant A

Participant A is a 20-year-old female women's volleyball player, who has participated in Sub-Junior, Junior, State National, and University levels. A had been competing in professional volleyball tournaments for seven years. After the shoulder injury (injured during a competition), she was feeling anxiety about taking part in the competition and was reluctant to participate in a formal competition. She also reported that she used to spend 16 hours per week in training volleyball, but because of anxiety, and getting more pessimistic about other teammates and her coach's estimation of her capabilities, she was not interested in training as much as before. She was self-disappointed. She was introduced through his coach because of her noticeable recent drop in training and performance after the recovery period.

3.3.1.1 Pre-test Assessment

The initial A's scores from RSA (Resilience Scale for Athletes) for the dimensions namely; self-determination - 31, physical toughness - 13, and emotional control and maturity - 15, shows that she was experiencing low self-determination and Emotional control and maturity.

3.3.1.2 NLP Intervention

Tailor-made Neuro-linguistic Programming was given for eight successive weeks to Participant A.

a. The first Phase of the Interview

During the first two sessions, most of the time, A's conversation was centred around the onset of her shoulder injury and the emotional challenges she was experiencing from the onset of injury with her coach and her teammates' criticism of her sports capabilities. She said, *"I don't know why I cannot have the same feeling about myself before the injury."* A's initial anxiety was coupled with difficulties interacting with her teammates. She commented on her own state of mind saying that she is filled with overthinking about others' opinions on her playing ability for the whole day with the fear of getting injured again.

She said, *"I have to make a balance between negative thoughts and staying motivated to participate in training to prepare myself for the real competition, but I have difficulties in executing my skills. My coach is helping me to regain my motivation, but it's difficult when you have a sensitive and painful shoulder."* A, also showed her prediction about getting injured

again, especially her shoulder: *"I am participating in training these days, but I always think that I am going to hurt myself again, and if it happens, both my career and my financial support towards my family."* These statements also reflected the reasons for her low self-determination, lack of emotional control, and maturity.

b. Second Phase of the Interview

During the second phase, collapsing anchoring was administered to her and she expressed the feeling for the session. A stated, *"I had many defeating thoughts within me and now I am happy that I am able to choose the best thought and is more helpful. It was good, and I felt better. I've learned that thoughts are not representing the reality of competition, but they are just my interpretations."* A also identified that adopting multiple perspectives on her thoughts and also being observed of her own thoughts without being involved was very useful. A said *"When I chose the "I" position in my mind, everything around me seemed to be real, but when I assumed the "You" position, I understood that I could be more optimistic and regulate my emotions about my volleyball competition performance."* Surprisingly, A commented *"when I chose the "Other" perspective in my mind, I understood that I can observe most of my thoughts without being involved with them too closely, and it helped me to have a new perspective of my thoughts and feelings when I represented those thoughts on participating in the competition."* She also stated that the collapsing anchoring technique had allowed her to reduce the negative emotional component of her negative thoughts while participating in the competition. She said *"Even though I have those thoughts that used to scare me, but now when I think about it, I feel neutral, and I felt more confident. Now, I can face the competition and enjoy the experience, although I still don't know what will happen in the competition."* A also stated that the NLP sessions have helped her to deal with the other part of his problems. She said, *"I think, now, I don't have that many thoughts about how others could criticize my performance. I am trying to behave like before the injury, letting myself visualize what is going to happen, and I am more confident now"*.

3.3.1.3 Post-test Assessment

After the Neuro-linguistic Intervention, the Resilience Scale for the Athletes was administered to Participant A, and the scores were obtained.

3.4 Case Study of Participant B

B is a 20-year-old female elite volleyball player, who was introduced by his coach. She had started playing volleyball when he was 13 and enjoyed playing the sport before her right eyelid was injured. B was playing at the State elite level of competition, spending at least 16 hours per week playing Volleyball. When she was referred to us after her recovery, she lacked interest in participating in the competition and, she told us that she had a terrible anxiety level before and during the competition, which showed her lack of proper motivation for the game.

3.4.1 Pre-test Assessment

The Sports Achievement Motivation Questionnaire was administered to Participant B and the scores of the dimensions were; for the internal locus of control – 6 and for the external locus of control – 7, which shows that Participant B is experiencing a low level of internal locus of control and external locus of control.

3.4.2 NLP Intervention

Tailor-made Neuro-linguistic Programming was given for eight successive weeks to Participant B.

a. First Phase of the Interview

During this phase of the interview, B described herself as an athlete who was facing the anxiety of reinjuring after completing his recovery course. She reported being distressed when feeling guilty and losing her motivation to participate in any competition. She was afraid of her volleyball skills getting worse and facing low motivation regarding her performance capabilities. B also mentioned that as a result of her worries and anxiety, she has no confidence and motivation to play well again during competition. However, she is asking more questions using the meta-model, showing that she is willing to cope with her psychological hardship, but she is suspicious about the intervention. For example, she stated *“Is this work? If maybe I need to be more involved with the challenging situations in competition to increase my confidence faster.”* She also commented, *“What if after the intervention I could not apply the skills I learnt?”*

b. Second Phase of the Interview

At the end of the sessions, B stated that the educational part seemed to be effective for her. She commented, *“The interventional part helped me to enhance my understanding of the competition events, and I learnt to be responsive rather being reactive to my thoughts and outer events as well through meta modelling (DDG) and reframing”*. She also stated, *“When I can see a competition event from all “I”, “You”, and “Others” positions, I can see if something is going to happen to me, and for many occasions, I cannot stop them, but I know I could have different feelings about what is going to happen and I can be internally motivated. After all, they are thoughts and not reality”*. These statements were as opposed to B’s first phase of the interview’s comments where he could see her situation only from an “I” observer position, feeling of motivation lowly, and making a negative prediction about the possibility of reinjuring in competitions and winning the competition.

3.4.5 Post-test Assessment

After the Neuro-linguistic Intervention, the Sports Achievement Motivation Questionnaire was administered to participant B, and the scores were obtained.

4. Results and Discussion

4.1 Case of Participant A

The scores from RSA (Resilience Scale for Athletes) for the dimensions namely; self-determination - 45, physical toughness - 15, and emotional control and maturity - 18 shows a significant increase in the scores due to NLP-based intervention. It is vivid that the Participant A has significantly improved in the dimensions of self-determination, physical toughness and emotional control and maturity.

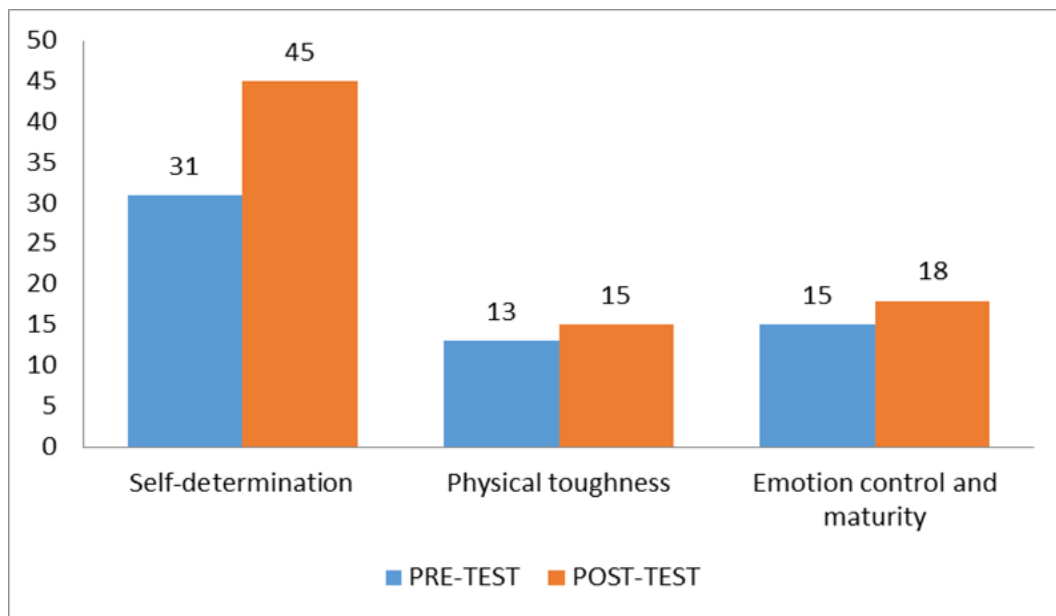


Figure 1: Pretest and Post-test Scores of Resilience Scale of Athletes

A research aimed at identifying the effect of NLP on mental skill sport resilience, El Sayed (2022) administered the psychological resilience scale for 40 students before and after the NLP intervention found statistical significance between the pre and post-test (22). Mahadewan (2023) found an increased level of mental strength, emotional stability, and sports anxiety by giving Neuro-linguistic intervention to the Golf players. These research papers support the results obtained in this study to show the effectiveness of NLP Neuro-linguistic Programming (23).

4.2 Case Study of Participant B

The Sports Achievement Motivation Questionnaire was administered again as a post-test to Participant B and the scores of the dimensions were; for the internal locus of control – 8 and for the external locus of control – 9, which shows the Participant B has significantly increased in the level of internal locus of control and external locus of control.

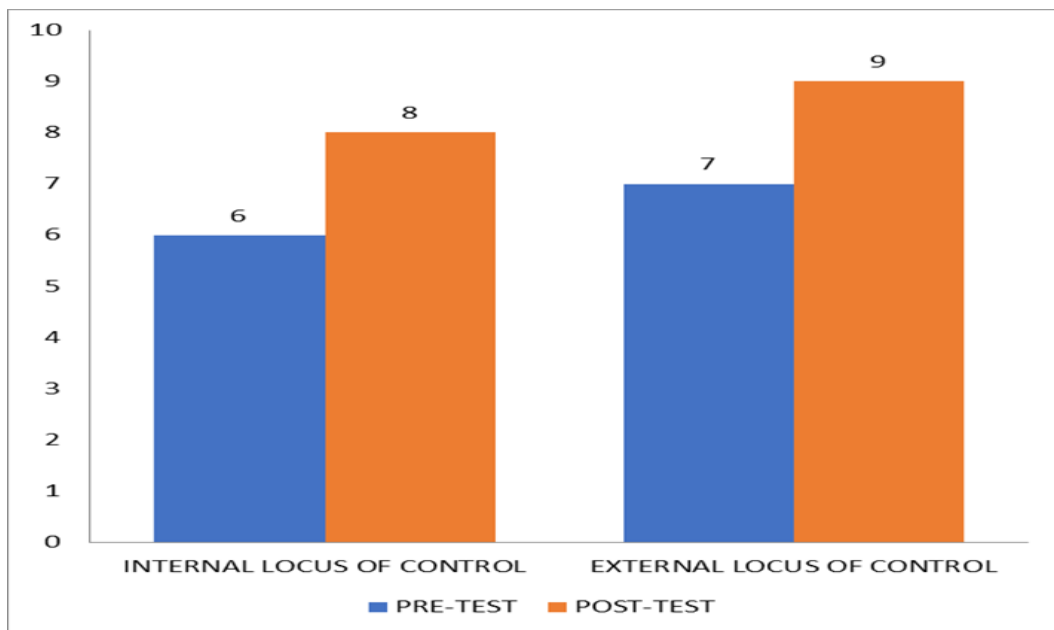


Figure 2: Pretest and post-test scores of The Sports Achievement Motivation Questionnaire

Lauren K. (2015), in his studies, showed that drop out from sports can be minimized with the achievement goal modification model (24). Hallgeir H (1997) explored the achievement motivation helping in avoiding failure and developing a strong sports-related future orientation (25). Mona Hijazi (2012) identified the effect of Neuro-linguistic Programming on the level of motivation of the fencers through the experimental method. In line with the above studies, the present case study shows the effect of NLP intervention on Sports Rehabilitation by improving the sports achievement motivation (26).

5. Recommendations

The following recommendations emerged through working on this case study research paper:

- A Neuro-linguistic Programming module along with the physical training for the athletes could be of real value.
- There could be further research to refine and optimize the Neuro-linguistic module in the course of time.

6. Conclusion

This study investigated the effectiveness of NLP-based interventions and strategies to meet the requirements and needs of two female volleyball players. Tailor-made NLP-based interventions and strategies have been given to the two female volleyball players for 8 weeks and their scores have been recorded. RSA (Resilience Scale for Athletes) was

used to measure the resilience of Participant A and the Sports Achievement Motivation Questionnaire was used to measure the achievement motivation of the case study of Participant B. It was found that the NLP-based intervention significantly improved the resilience of Participant A and has significant improvement in the achievement motivation of Participant B. Thus, this research proves that NLP-based strategies and interventions have a significant impact on the performance and well-being of athletes.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

- 1) Bandler, R. & Grinder J. (1979). *Frogs into Princes: Neuro Linguistic Programming*. Moab, UT: Real People Press. pp. [15](#), [24](#), [30](#), [45](#), [52](#).
- 2) Bandler, R. (2008). *Get the life you want: the secrets to quick and Lasting Life change*, Dublin: Harper Collins Publications.
- 3) Beddoes-Jones, F. and Miller, J. (2007). Short-term cognitive coaching interventions: Worth the effort or a waste of time?, *The Coaching Psychologist*, 3, (2), 60-69
- 4) Damasio, A. (2004). *Looking for Spinoza: Joy, Sorrow and the Feeling Brain*, London: Vintage
- 5) Damasio A. (2006). *Descartes' Error: Emotion, Reason and the Human Brain*, London: Random House/Vintage.
- 6) Dilts R. (1976). *Roots of Neuro-linguistic Programming*, California: Dilts Strategy Groups.
- 7) Kannadasan, K. (2023). Interpersonal relationship and locus of control among elite level football players at different playing position. *Int J Physiol Nutr Phys Educ*;8(2):44-46.

- 8) El Sayed El Essawy, Mona Dowydar (2022). Effect of counseling program based on Neuro-linguistic Programming (NLP) on self-learning skills and psychological resilience for students of the faculty of sport education during novel coronavirus pandemic. *The Scientific Journal of Physical Education and Sports Sciences*. 55(1) 197-237.
- 9) Frankl, V. (1959). *Man's Search for Meaning*, Boston: Beacon Press
- 10) Gardner, L. A. (2017). Continued participation in youth sports: The role of achievement motivation. *Journal of Applied Sport Psychology*, 29(1), 17-31.
- 11) Hall, L. M. and Bodenhamer, B. (1997). *Figuring Out People*, Carmathen, Wales: Crown House Publishing Limited.
- 12) Hallgeir H., Thomassen, O. (1997). *Achievement motivation, sports-related future orientation, and sporting career*. Genetic, Social, and General Psychology Monographs. Continued Participation in Youth Sports: The Role of Achievement Motivation: *Journal of Applied Sport Psychology*: Vol 29, No 1 (tandfonline.com).
- 13) Hijazi, M. (2012). NLP to Enhance Motivation and Performance of Fencers. *2nd International Social Sciences in Physical Education and Sport Congress*. Ankara, Turkey.
- 14) Irshad Hassan C., K. Kannadasan. (2019). Analysis of personality traits and playing ability of Kerala youth soccer players. *Int J Physiol Nutr Phys Educ*; 4 (2):45-47.
- 15) Joseph O'Connor (2001). *NLP Workbook*, London: An e-book from Harper Collins Publishers.
- 16) Kaplan E., Andre H. (2021). Investigation of the Relationship Between Mental Training and Sports Injury Anxiety. *Turkish Journal of Sport and Exercise* 23(1): 1-8.
- 17) Kotera Y., Sheffield D., Van Gordon W. (2019). The applications of Neuro-linguistic programming in organizational settings: A systematic review of psychological outcomes. *Hum Resour Dev Q.*;30(1):101–16. doi:10.1002/hrdq.21334.
- 18) Lam C. H. (2015). Learning experience of "six-step reframing" in neuro-linguistic programming and its possible influences on thinking styles [dissertation]. HKU Theses Online (HKUTO).
- 19) Mahadewan M., Nelfianty M. R., Norsilawati A. R. (2023). Development of Neuro-linguistic Programming Module for Golf Athletes: A Needs Analysis. *Journal of Learning Theory and Methodology*. 4(2) <https://doi.org/10.17309/jltm.2023.2.01>.
- 20) M. Hijazi (2012). NLP to Enhance Motivation and Performance of Fencers 2nd International Social Sciences in Physical Education and Sport Congress 31 May - 2 June, 2012 – Ankara, Turkey.
- 21) Muniandy, M. R. (2023). Development of Neuro-linguistic Programming Module for Golf Athletes: A Needs Analysis. *Journal of Learning Theory and Methodology*, 4(2), 45-49.
- 22) O'Connor J, Seymour J. (2011). *Introducing NLP: Psychological skills for understanding and influencing people*. Conari Press.

- 23) Reese, R. P. (2012). Effectiveness of Psychological intervention following sport injury. *Journal of sport and Health Science* 1(2), 71-79.
- 24) Reese, Ryan P., Jingzhen Y. (2012). Effectiveness of Psychological Intervention Following Sport Injury. *Journal of Sport and Health Science* 1(2): 71-79.
- 25) Robert S. Weinberg, Daniel Gauld (2015). *Foundations of sports and exercise psychology*. United States: Human Kinetics.
- 26) Scott M, W. J. (2008). Athletic trainers' and physical therapists' perceptions of psychological skills within sport injury rehabilitation programs. *J Athl Train* 43(3), 258-264.
- 27) Scott M, W. J. (2008). Athletic trainers' and physical therapists' perceptions of psychological skills within sport injury rehabilitation programs. *J Athl Train* 43(3), 258-264.
- 28) [Stewart A. Vella](#), [Christopher A. Magee](#) (2015). Continued Participation in Youth Sports: The Role of Achievement Motivation. *Journal of Applied Sports Psychology*, <https://doi.org/10.1080/10413200.2016.1173744>.
- 29) Sri Ramanujam N.M., K. Kannadasan. A study on coping skills among male cricketers of different age category. *Int J Physiol Nutr Phys Educ* 2023;8(2):324-328. DOI: <https://doi.org/10.22271/journalofsport.2023.v8.i2e.2817>
- 30) Susie Linder-Pelz (2008). Meta-coaching: a methodology grounded in psychological theory. *International Journal of Evidence-Based Coaching and Mentoring* Vol. 6, No.1, pp. 43.
- 31) Tom Hoobyar, Tom Dotz and Suzan Sanders (2013). *NLP The Essential Guide*, New York: Harper Collins Publishers.
- 32) Turan H., Kodaz K., Turan G. (2017). The effect of NLP education on the teaching profession in Turkey. *Int J Educ Sci*; 15(1-2):120-5. doi:10.1080/09751122.2016.11890520
- 33) Wętyczko L. (2016). Neuro-linguistic programming in the process of self-management. *J Sci Gen. T. Kosciuszko High Mil Acad Land Forces*; 180(2):139-58. doi:10.5604/17318157.1216085.
- 34) Zamin, S., Hosseininasab, S. D., Hashemi, T. (2009). Neuro-linguistic programming training effects on students' self-efficacy and problem-solving. *Journal of Psychology*, 51(3): 258-271.

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