IV. Experimental Design

1. Purpose

The purpose of this experiment is to see if the use of hypnosis will improve a baseball player’s on-base percentage. (OBP)

2. Problem

Will a baseball player’s on-base percentage (OBP) improve, stay the same or decrease with the use of hypnosis?

3. Research

This experiment is to determine if hypnosis will improve a baseball player’s on-base percentage (OBP). Hypnosis has been used for many years and in many ways to help people. With hypnosis, a patient can maximize the healing process after surgery. A smoker can be hypnotized to quit smoking. Hypnosis can also be used to help a student improve their grades. Olympians and professional athletes use hypnosis to gain a mental edge on their opponents. As you can see hypnosis is used in many ways.

Hypnosis is a relaxed state of consciousness. The brain is operating at a slower pace and thinking about fewer things. So, when the brain is in a relaxed state, a hypnotist’s suggestions and
visualizations given to the subject become 25 times more effective. Hypnotism communicates directly to the subconscious mind, helping to remove negative thoughts which interfere with a player’s skills and replace negative thoughts with positive helpful thoughts.

There are two parts of the mind; the conscious and the subconscious. The conscious is where logic, reasoning, analysis and decision making is stored. The subconscious consists of long term memory, habits, learned responses, and self preservation. We don’t think about scratching an itch. This is an example of the subconscious at work. If negative thoughts enter into the conscious mind during practice or play, they can settle into the subconscious mind and become a bad habit resulting in a reduced level of performance.

When an athlete performs, negative thoughts and bad habits can affect concentration and focus, causing hesitation in athletes’ thought process and reaction. This hesitation can result in a poor performance in the form of missed opportunities, technical errors and fear of failure. Hypnotism accesses the subconscious mind, allowing the athlete to perform without any conscious thought required. It all happens automatically.
Knowing the mind controls the body and with the knowledge of hypnosis, we can improve our life and performance in many ways. This may include a patient trying to maximize the healing process after surgery, a student trying to improve their grades, or a baseball player trying to improve their on-base percentage. Today, it is becoming more known that hypnosis is used to help people use their minds to make lasting changes in both their performance and lives.

4. **Hypothesis**

I believe that with the use of hypnosis, a baseball player’s on-base percentage (OBP) will improve.

5. **Subject**

The subject being tested is a 12 year old baseball player.

6. **Variables**

- Subject batting *without* the use of hypnosis.
- Subject batting *with* the use of hypnosis.

7. **Controls**

- The same subject is being used in this experiment
- The same certified hypnotist is being used.
- The same number of at bats is being used.
- The same baseball bat is being used.
8. **Materials**

1. Subject – Baseball Player
2. Baseball game setting
3. Bat
4. Helmet
5. Baseballs
6. Hypnotist
7. Pencil
8. Paper

9. **Procedures**

1. Without the use of hypnosis, the subject participates in three baseball tournaments and the subject’s at bats are recorded. (Totaling 18 games/36 plate appearances)
2. Each at bat is recorded accordingly if the batter reaches base and is safe or out, walks, gets hit by a pitch, hits a sacrifice fly or strikes out.
3. From the data collected the on-base percentage is calculated.
4. The OBP is calculated by using the formula:
OBP = \( \frac{H + HBP + BB}{AB + HBP + BB + SF} \)

Where:

H = Hits

HBP = Times hit by a pitch

BB = Base on Balls (walks)

AB = At bats

SF = Sacrifice flies

5. The OBP is rounded to the third decimal place. (ie. .123)

6. Then, the subject is hypnotized by a certified hypnotist three separate times before each tournament and the subject’s at bats are recorded. (Totaling 18 games/36 plate appearances)

7. The subject also listens to a self-hypnosis cd “Improve your Baseball Skills” three times prior to each tournament.

8. Each at bat is recorded accordingly.

9. The on-base percentage is calculated.

10. Then compare tournaments 1-3 without hypnosis to tournaments 1-3 with the use of hypnosis to see if the OBP increased, decreased or stayed the same.
11. The OBP of all 18 games and 36 at bats without and with hypnosis is compared to see if the OBP increased, decreased or stayed the same.

10. **Data**

**On-Base Percentage Comparison**

**without Hypnosis and with Hypnosis**

<table>
<thead>
<tr>
<th>Exp. 1 OBP</th>
<th>Exp. 2 OBP</th>
<th>Exp. 3 OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.357</td>
<td>0.700</td>
<td>0.529</td>
</tr>
<tr>
<td>0.692</td>
<td>0.800</td>
<td>0.563</td>
</tr>
</tbody>
</table>

[Bar chart showing OBP comparisons with and without hypnosis]
## 10. Data

**Experiment #1**

### Tournament #1

**On Base Percentage Without Hypnosis**

<table>
<thead>
<tr>
<th>Date</th>
<th>AB</th>
<th>H</th>
<th>HBP</th>
<th>BB</th>
<th>SF</th>
<th>OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game 1</td>
<td>19-Nov</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.334</td>
</tr>
<tr>
<td>Game 2</td>
<td>19-Nov</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>Game 3</td>
<td>20-Nov</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.667</td>
</tr>
<tr>
<td>Game 4</td>
<td>20-Nov</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.334</td>
</tr>
<tr>
<td>Game 5</td>
<td>20-Nov</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.334</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.357</td>
</tr>
</tbody>
</table>

**Experiment #2**

### Tournament #2

**On Base Percentage Without Hypnosis**

<table>
<thead>
<tr>
<th>Date</th>
<th>AB</th>
<th>H</th>
<th>HBP</th>
<th>BB</th>
<th>SF</th>
<th>OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game 6</td>
<td>17-Dec</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>Game 7</td>
<td>17-Dec</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0.667</td>
</tr>
<tr>
<td>Game 8</td>
<td>18-Dec</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>Game 9</td>
<td>18-Dec</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>Game 10</td>
<td>18-Dec</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0.700</td>
</tr>
</tbody>
</table>

**Experiment #3**

### Tournament #3

**On Base Percentage Without Hypnosis**

<table>
<thead>
<tr>
<th>Date</th>
<th>AB</th>
<th>H</th>
<th>HBP</th>
<th>BB</th>
<th>SF</th>
<th>OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game 11</td>
<td>27-Jan</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1.000</td>
</tr>
<tr>
<td>Game 12</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.500</td>
</tr>
<tr>
<td>Game 13</td>
<td>28-Jan</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.500</td>
</tr>
<tr>
<td>Game 14</td>
<td>28-Jan</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>Game 15</td>
<td>29-Jan</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0.667</td>
</tr>
<tr>
<td>Game 16</td>
<td>29-Jan</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.500</td>
</tr>
<tr>
<td>Game 17</td>
<td>29-Jan</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>Game 18</td>
<td>29-Jan</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0.529</td>
</tr>
</tbody>
</table>

### Grand Totals Without Hypnosis

<table>
<thead>
<tr>
<th>AB</th>
<th>H</th>
<th>HBP</th>
<th>BB</th>
<th>SF</th>
<th>OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>36</td>
<td>16</td>
<td>0</td>
<td>5</td>
<td>0.512</td>
</tr>
</tbody>
</table>

**Grand Totals With Hypnosis**

<table>
<thead>
<tr>
<th>AB</th>
<th>H</th>
<th>HBP</th>
<th>BB</th>
<th>SF</th>
<th>OBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>36</td>
<td>23</td>
<td>0</td>
<td>3</td>
<td>0.667</td>
</tr>
</tbody>
</table>

**Formula for On Base Percentage (OBP)**

\[ OBP = \frac{H+HBP+BB}{AB+HBP+BB+SF} \]
11. **Results**

From the data that was collected in experiment #1, the on-base percentage without hypnosis was 0.357 and the on-base percentage with hypnosis was 0.692.

From the data that was collected in experiment #2, the on-base percentage without hypnosis was 0.700 and the on-base percentage with hypnosis was 0.800.

From the data that was collected in experiment #3, the on-base percentage without hypnosis was 0.529 and the on-base percentage with hypnosis was 0.563.

Overall, after a total of 36 at bats, the OBP without hypnosis was 0.512 and the OPB with hypnosis was 0.563.

12. **Conclusion**

In conclusion from the data that was collected, hypnosis did prove to increase a Baseball player’s on-base percentage (OBP). With the use of hypnosis the subject was more consistent overall in his batting and improved his OBP by 0.155.

13. **Applications**
This project relates too many of today’s athletes. Weather they are professional or amateurs, these athletes use hypnosis to gain the mental edge on their opponents. In today’s world hypnosis can be used in many ways. An athlete can improve his or her performance. A patient can maximize the healing process and control the pain after surgery. A smoker can be hypnotized to quit smoking. With this knowledge, hypnosis can improve our life and performance in many ways.

14. Recommendations

Recommendations for this experiment would be to see if hypnosis improves performance in other sports, improves school and test grades and even if it improves memory. Hypnosis is a valuable tool that many people are unaware of.

V. Acknowledgements

I would like to thank my friend and hypnotist Laura King, C. Ht. for helping me understand hypnosis and improving my on-base percentage. Also, I would like to thank my mother and father for supporting me in this project.

VI. Bibliography
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http://www.selfhypnosishypnotherapy.com/about-hypnosis.html


On Base Percentage Calculator/ OPB Calculator.

www.obpcalculator.com


Understanding Hypnosis. Hypnosis Network.

http://www.hypnosisnetwork.com/articles/a/1/What-Is-Hypnosis

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