

## Autonomy-Supportive Coaching: Why and how?



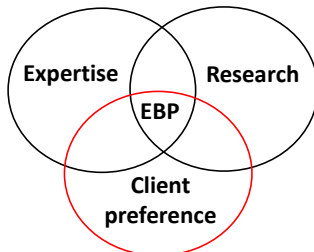
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## Plan of Talk

- Autonomy-supportive coaching
- Implementation strategies
- Case-studies

## Background

- Autonomy-supportive coaching = client preferences in EBP figure.



## Background

- **Autonomy:** the ability to make choices and exert control over one's environment.
- Supporting the need for autonomy by providing choices = effective coaching strategy.



## Background

Two common types of instructions:

**Supportive:** allows to make choices & exert control over practice environments.

**Controlling:** deprives choices and/or a sense of control over practice environments.

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"Do you prefer we start with exercise X or Z?"

"You will start with exercise X and then complete Z"

## Background

Two common types of instructions:

**Supportive:** allows to make choices & exert control over practice environments.

"Do you prefer we start with exercise X or Z?"

"When do you want me to provide feedback?"

**Controlling:** deprives choices and/or a sense of control over practice environments.

"You will start with exercise X and then complete Z"

"I will provide feedback after the final rep"

## Background

Studies have shown that supportive > controlling.



Balance tasks



Exercise motivation and performance



Golf putting accuracy



Punching performance



Grip force

Halperin et al., 2018

## Background

### Choices:

- Order of exercises
- Exercise selection
- Number of reps
- Timing of feedback
- Training duration
- Color of ball/matt



### Outcomes:

- Golf putting
- Dart throwing
- Balance drills
- Punching forces
- Basketball shot
- Running economy

## Study 1

Psychon Bull Rev. 2015 Oct;22(5):1383-8. doi: 10.3758/s13423-015-0814-7.

**Choose to move: The motivational impact of autonomy support on motor learning.**

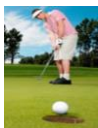
Lewthwaite R<sup>1,2</sup>, Chiviacowsky S<sup>3</sup>, Drews R<sup>3</sup>, Wulf G<sup>4</sup>.

Author information

## Study 1

### Control group

practiced golf putting for a set number of trials.



Lewthwaite et al., 2015

## Study 1

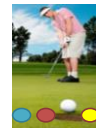
### Control group

practiced golf putting for a set number of trials.



### Choice group

Practiced golf putting for a set number of trials **but got to choose color of ball (!)**



Lewthwaite et al., 2015

## Study 1

Greater improvement in choice group

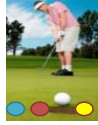
### Control group

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Lewthwaite et al., 2015

## Study 2

Psychol Res. 2017 Sep;81(5):1051-1058. doi: 10.1007/s00426-016-0790-1. Epub 2016 Jul 27.

**Choices enhance punching performance of competitive kickboxers.**

Halperin<sup>1,2</sup>, Chapman DW<sup>3,4</sup>, Martin DT<sup>4</sup>, Lewthwaite B<sup>5,6</sup>, Wulf G<sup>7</sup>.

Author information

## Study 2

### Part 1 – case-study

World champion kickboxer completed a no-choice & choice round over 6 days.

### Part 2 – group study

13 amateur competitive kickboxers completed same protocol over 2 days.

Halperin et al., 2017

## Study 2

Combat athletes delivered 12 punches in a **pre-determined order** (no-choice) and in a **self-selected order** (choice).



Halperin et al., 2017

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Combat athletes delivered 12 punches in a **pre-determined order** (no-choice) and in a **self-selected order** (choice).

### Day 1

Control

1 min

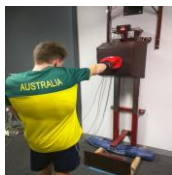
Choice

### Day 2

Choice

1 min

Control

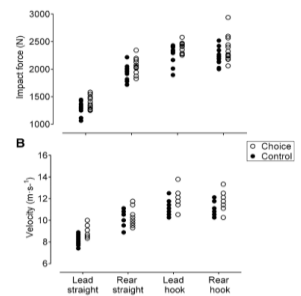


Halperin et al., 2017

## Study 2

### Part 1 – Case

Athlete punched **5-10% harder & 6-11% faster** in the choice rounds.

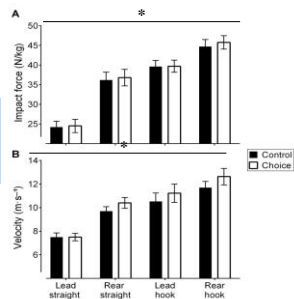


Halperin et al., 2017

## Study 2

### Part 2 – Group

Athletes punched **3% harder** & **6% faster** in the choice rounds.



Halperin et al., 2017

## Mechanisms

Autonomy (the ability to make choices) is considered a fundamental psychological need & even a biological necessity.

Acting autonomously is related to activation of brain regions associated with dopamine release.



Leotti & Delgado, 2011


## Generalization

- The need for autonomy does not seem to be culture dependent.



Japan) totaling 12,906 participants showed a moderate correlation ( $r = .46, p < .001$ ) between autonomy and subjective well-being. The difference between correlations for studies conducted

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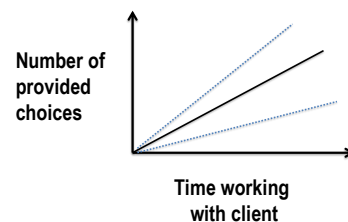
## Recommendations

- Let the athletes you work with make some decisions. It will have a positive effect on their performance, learning, motivation, etc.



## Recommendations

- Follow a less-to-more approach when it comes to the number of choices provided to new clients.



## Recommendations

3. For the most part, restrict the provided choices to a range rather than open-ended choices



"Complete anywhere between 8 to 10 reps"

"Choose the number of reps for your next set"

## Recommendations

4. Mostly use suggestive language when coaching



"I suggest..."  
"Let's try..."

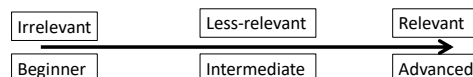
"You must..."  
"I want you to..."

## Recommendations

5. Use a variety of choices: irrelevant, less relevant and task relevant.

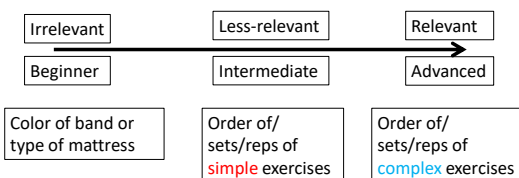
## Recommendations

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## Recommendations


6. Figure out who is in front of you.

Large variability between people concerning how many and what type of choice they benefit from.

Explore.



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## Case-study 1 - S&C

- ANBF Australian & Australasian middleweight boxing champion.
- Intelligent, committed, determined, knowledgeable & wanted to be involved.



## Case-study 1 - S&C

- Heavily involved in decisions concerning training approach & design.
- Mainly so as time went by (> 2 years).
- For the most part, my coaching language was suggestive.
- **Thoughts?**

## Case-study 2 - Kickboxing

- ISKA featherweight kickboxing world champion.
- Trusts his team, passionate, easy to coach, open-minded & a hard worker.



## Case-study 2 - Kickboxing

- Involved to a lesser extent in decisions concerning training approach & design.
- High trust in team = preferences for group decision-making.
- For the most part, my coaching language was suggestive with bouts of controlling language.
- **Thoughts?**

**Thank you for your time!**