Do coached and non-coached Masters athletes differ in their reports of psychological need satisfaction and thwarting?

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Masters athletes (MAs)

Generally 35+ years of age

Formal sport registration

Prepare to compete via regular training

One of fastest growing athletic cohorts in Westernized countries

(Weir et al., 2010; Young, 2011)
The coached Masters sport context

Coached MAs have reported:

- self-efficacy, performance, interest in sport (Callary et al., 2015)
- Social, health, and performance benefits (Ferrari et al., 2017)
- Relating to coaches + being motivated by them (Rathwell et al., 2015)
- Coach supports autonomous learning needs (MacLellan et al., 2018)
Psychological need satisfaction/thwarting

(Bartholomew et al., 2011; Deci & Ryan, 2000; Taylor, 2015)

Need Satisfaction
- Autonomy
- Competence
- Relatedness

Desirable Outcomes

Need Thwarting (Frustration)
- Autonomy
- Competence
- Relatedness

Harmful Outcomes
Medic et al. (2012) study

Coached MAs reported intrinsic motivation than non-coached MAs

Underlying mechanisms?
• Coached context foster MAs’ basic psychological needs?

Limitations:
• 71 Masters track and field athletes
• Only “Yes” or “No” for coaching status
The current study

Compared coached, sometimes-coached, and non-coached MAs for psychological need satisfaction and thwarting

H1: Coached & sometimes-coached MAs ↑ competence satisfaction
H2: Coached & sometimes-coached MAs ↑ relatedness satisfaction
H3: No group differences on autonomy satisfaction

No hypotheses for need thwarting (exploratory approach)
Participants

384 MAs (205 females, 178 males, 1 non-binary)

Mean age = 57.70 years (SD = 12.43)

92% Caucasian

Individual sport MAs (e.g., swimming, track & field, skiing)
Highest level of competition

- International: 32%
- National: 25%
- Provincial: 14%
- Regional: 14%
- Recreational: 16%

% of Participants
Self-categorization

“Do you have a coach/instructor that regularly supports you in your primary sport?”

Yes (n = 192)

Sometimes (n = 62)

No (n = 130)
# Demographics

<table>
<thead>
<tr>
<th></th>
<th>COACHED</th>
<th>SOMETIMES-COACHED</th>
<th>NON-COACHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Times coached per week</td>
<td>2.96</td>
<td>1.57</td>
<td>.17</td>
</tr>
<tr>
<td>Times train/practice per week</td>
<td>4.25</td>
<td>4.86</td>
<td>4.67</td>
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“Coaching dose” 70% 32% 4%
Measures

**Psychological Need Satisfaction**

- Basic Needs Satisfaction in Sport Scale (Ng et al., 2011)
  - Autonomy → Choice (.84), IPLOC (.71), Volition (.32)
  - Competence (.87)
  - Relatedness (.88)

**Psychological Need Thwarting**

- Psychological Need Thwarting Scale (Bartholomew et al., 2011)
  - Autonomy (.79)
  - Competence (.83)
  - Relatedness (.78)
Main analyses

ANCOVAS (covariate = times train/practice per week)

Sidak-corrected posthoc tests

$\eta^2_p$ guidelines (Cohen, 1969):

- .01 (small)
- .06 (medium)
- .14 (large)
Results (satisfaction)

**AUTONOMY-CHOICE**

Main effect: \( p = .331; \eta_p^2 = .01 \)
Covariate: \( p = .533; \eta_p^2 = .00 \)

**AUTONOMY-IPLOC**

Main effect: \( p = .688; \eta_p^2 = .00 \)
Covariate: \( p = .212; \eta_p^2 = .00 \)
Results (satisfaction)

**COMPETENCE**

- Coached: \( p = .517; \eta_p^2 = .00 \)
- Sometimes-Coached: \( p = .005; \eta_p^2 = .02 \)
- Non-Coached: \( p < .001; \eta_p^2 = .08 \)

**RELATEDNESS**

- Coached: \( p = .009; \eta_p^2 = .02 \)
- Sometimes-Coached: \( p = .009; \eta_p^2 = .02 \)
- Non-Coached: \( p = .009; \eta_p^2 = .02 \)
Results (thwarting)

**AUTONOMY**

Coached  Sometimes-Coached  Non-Coached

Main effect: $p < .001; \eta^2 = .05$
Covariate: $p = .710; \eta^2 = .00$

**COMPETENCE**

Coached  Sometimes-Coached  Non-Coached

Main effect: $p = .605; \eta^2 = .00$
Covariate: $p = .771; \eta^2 = .00$
Results (thwarting)

**Main effect:**
- $p = .102$
- $\eta_p^2 = .01$

**Covariate:**
- $p = .683$
- $\eta_p^2 = .00$

The graph shows the relatedness across different coaching conditions:
- **Coached**
- **Sometimes-Coached**
- **Non-Coached**

Main effect: $p = .102; \eta_p^2 = .01$
Covariate: $p = .683; \eta_p^2 = .00$
Discussion: Competence satisfaction

Lack of group differences unexpected

MAs credited coaches for feeling more confident + technically skilled (Callary et al., 2015)

Non-coached MAs may feel quite competent?

Coaches’ global leadership did not predict MAs’ self-confidence (Wilson et al., 2004)
Discussion: Relatedness satisfaction

Coaches serve a role in helping MAs fulfill need for belonginess

Coaches make efforts to be relatable + establish friendships with MAS (Callary et al., 2015)

Coaches facilitate social connectedness among MAs (Ferrari et al., 2017)

MAs drawn to coached context (i.e., training groups)
Discussion: Autonomy thwarting

Low levels of autonomy thwarting across all groups

Still, coached MA groups higher autonomy thwarting

MAs want coaches to hold them accountable to structured workouts (Callary et al., 2015)

• Slight autonomy frustration may be inevitable
Future directions

Coach-influenced practice structure and MAs’ opportunities for self-direction

Adult-oriented coaching practices
(Callary et al., 2017)

Coaching context → Coach’s autonomy-supportive behaviours → Athletes’ basic psychological needs → Athletes’ motivation

Mageau & Vallerand (2003)
For Masters coaching research:

www.coachingmastersathletes.com