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**Section IV – Psychological and Sociological Aspects of Sport and Exercise**

# Enjoying the Peaks and the Valleys: Exploring the Predictive Value of the Peak-and-End Rule on Enjoyment in a Resistance Training Session

*by*

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*The peak-and-end rule postulates that the most salient affective responses during exercise (i.e., most negative and/or positive peak) and the affect experienced at the end of a session (i.e., end affect) are associated with variables related to exercise adherence, such as enjoyment. However, this phenomenon remains considerably unexplored in resistance training (RT). This study aimed to explore the predictive value of the peak-and-end rule on the enjoyment levels in a commonly prescribed RT session. Experienced exercisers (N = 43) responded to the Feeling Scale (FS) after two aerobic exercise moments and six RT exercises. Individual and hierarchical regression analyses were applied to test the predictive value of the FS peaks and the FS end, as well as the FS slope and the FS mean. Results showed that the FS end was the only variable that consistently predicted enjoyment post- (15%) and 24 h after exercise (11%), while all variables predicted 24 h after enjoyment (7% to 15%). Overall, the peaks and end affect might be necessary for enjoyment promotion, but only the end affect presented consistent results. Future research should investigate the effect of the peak-and-end rule in RT on retrospective affective variables and objective exercise behaviour.*

***Keywords**: affect; feeling scale; Gestalt characteristics; heuristic; strength training*

## Introduction

Resistance training (RT) is a form of exercise that can provide several relevant health benefits (American College of Sports Medicine, 2021; Momma et al., 2022). As such, continuous enrolment in an RT program has the potential to impact public health positively. However, considering the alarming levels of physical inactivity (Strain et al., 2024) and high dropout rates in common locations of RT practice such as health clubs (Buckworth et al., 2013; Sperandei et al., 2016), this potential still has to reach its fruition.

One potential approach to increase RT adherence is through the promotion of a more pleasurable exercise practice (Dukes et al., 2021; Stevens et al., 2020). After decades of research based on cognitive approaches demonstrating only small-to-moderate effects on exercise behavior (Albarracín et al., 2024; Ekkekakis and Zenko, 2016; Rhodes et al., 2019), contemporary theories have proposed the integration of hedonic assumptions to complement the limitations of previous models and strategies (Brand and Ekkekakis, 2018; Dukes et al., 2021; Strobach et al., 2020). In other words, adding affective considerations to strategies that have solely focused on cognitive factors (e.g., intention, social support, behavioral attitudes) is expected to result in more effective behavior change strategies. Affect is an umbrella term encompassing the constructs of core affect, emotions, and the mood (Ekkekakis, 2013). Of these, core affect (i.e., non-reflective elementary feelings, most evident in the mood and emotion, but always consciously available; Ekkekakis, 2013) appears to be important for the sustainability of

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exercise behavior, particularly its dimension of affective valence (i.e., pleasure/displeasure). Accordingly, research has shown that positive core affective valence can positively impact behavior maintenance (Ekkekakis et al., 2011; Rhodes and Kates, 2015; Teixeira et al., 2024; Williams, 2008), effectively putting the spotlight on affective phenomena when addressing regular RT practice and exercise adherence as a whole.

Similarly, other affect-related variables have demonstrated their relevance for exercise adherence (Klos et al., 2020). One such a variable is enjoyment. Understood as generalized feelings of pleasure and satisfaction, enjoyment is considered a mixture of affective experiences and cognitive appraisals (Ekkekakis et al., 2018) and can reflect intrinsic motivation for physical activity participation (Nielsen et al., 2014), habit formation, and intention to continue exercising (Teixeira et al., 2022), and has been identified as a predictor of exercise adherence (Allender et al., 2006; Gardner et al., 2017; Rodrigues et al., 2020). As such, creating strategies that ensure more enjoyable RT may be of relevance for the maintenance of a regular exercise practice.

An important factor for exercise adherence is how an individual recalls or evaluates a previous exercise experience and how it influences the likelihood of repeating it in the future. Previous research in behavior economics has demonstrated that specific affective moments are particularly relevant to how an experience will be remembered (Fredrickson, 2000; Kahneman et al., 1993). This phenomenon, known as the peak-and-end rule, suggests that the most intense affective response of the experience (i.e., peaks, most negative and/or most positive affective response) and the affect experienced in its finishing moments (i.e., end core affect) will weigh heavily in how the event will be recalled (Fredrickson, 2000; Hargreaves and Stych, 2013). These affective moments have been linked with remembered affect (i.e., remembered utility in behavior economics) (Kahneman et al., 1993; Redelmeier et al., 2003), which can be considered a recall of the affective response during previous physical activity.

Considering that affective peaks and end affect pose important implications for exercise adherence, research in the last decade has started to explore them in exercise. For example, the results of Hargreaves and Stych (2013) demonstrated that the affective peaks and end affect could significantly predict remembered affect in aerobic activities; in turn, Zenko et al. (2016) showed that a session that ended with a more positive affective response was associated with greater enjoyment, remembered affect, and forecasted affect. Additionally, the results of Zenko et al. (2016) also demonstrated that the individual slope of pleasure (i.e., calculated through linear regression analysis) successfully predicted post-exercise remembered affect (35–46% of variance), forecasted affect (37–40%), and enjoyment (33%). Importantly, the mean affective response of the session was uncorrelated to any of these retrospective affective variables.

Currently, no studies have been found exploring the complete theoretical foundation of the peak-and-end rule (e.g., both the affective peaks and end affect) in RT. However, two studies using resistance exercises in circuit training indicate that a protocol with a decreasing intensity across the session elicited greater remembered affect and enjoyment than a protocol with a progressive intensity (Hutchinson et al., 2020, 2023). Additionally, the affective response of the final set of exercises (i.e., a measure similar to the end affect, as proposed by the peak-and-end rule) was more strongly correlated with these three retrospective affective variables than the affective response of the first set (in both protocols) (Hutchinson et al., 2020, 2023), and both the slope and the mean affective response of the session (Hutchinson et al., 2020). Furthermore, timing and methods for the end affect assessment vary among studies (e.g., FS scores averaged at the end of the circuit). These differences can raise some doubts when interpreting the end affect value for future exercise participation, given that, as posited by Hargreaves and Stych (2013), end affect should be considered *"the affect experienced at the end of the event"*. Moreover, international guidelines recommend a low-intensity cool-down stage at the end of a session (e.g., American College of Sports Medicine, 2021), meaning that it should be conducted immediately after this stage that the end affect should be evaluated, and not necessarily at the end of the fundamental/conditioning stage (i.e., the stage of an exercise session where its main goals are accomplished). Considering its methodological and safety implications, the cool-down stage is an important and integral part of an

exercise session and, as such, should not be neglected. Thus, although key to the advancements of the peak-and-end rule research, previous explorations have not specifically addressed how one feels during the final moments that can better account for a more approximate end affect assessment. These moments can be considered crucial for affective response measurement, given that they represent the end of the (whole) exercise experience, and thus reflect the theoretical underpinning of the peak-and-end rule.

Therefore, the objective of this study was to explore the predictive value of the peak-and-end rule on enjoyment levels of a commonly prescribed and evidence-based RT session. For this purpose, the peak-and-end rule variables (i.e., high peak, low peak, and end affect) along with variables representative of the totality of the session's affective response (i.e., individual slope and the session mean) were examined to verify whether the specific affective moments would demonstrate a better explanatory power than the global affective response. First, the individual predictive value of all affective variables for (1) post-exercise and (2) 24h-after enjoyment was tested. This was accomplished with linear regression analyses to test the explanatory power of particular variables. Second, a hierarchical regression model with the peak-and-end rule variables was performed for the same enjoyment measurement moments. In this model, a second block with the addition of the affective slope, and a third block with the addition of the session's mean affective response, was added according to the hypothesis that the model's explanatory power might be improved. For these analyses, the session termination moment was used as the time point for the end-affect assessment, and the affective slope and the session mean were calculated for every participant.

## Methods

### *Participants*

Sample size calculations were conducted with the Soper's *a priori* sample size calculator for hierarchical multiple regression to ensure sufficient statistical power (Soper, 2023). A minimum total sample size of 42 was defined according to the following input parameters: effect size of $f^2 = 0.35$ (based on several related studies, e.g., Alves et al., 2019; Hutchinson et al., 2020), the statistical power of $1-\beta = 0.80$, and $\alpha = 0.05$.

Accordingly, a total of 48 participants were recruited for this study. Five were ultimately excluded as they were unable to reach muscle concentric failure when intended (see protocol for details), resulting in a final sample size of 43 participants (male = 21; $M_{age}$ = 34.69 ± 6.71 years; $M_{experience}$ = 8.32 ± 4.54 years; $M_{BMI}$ = 24.26 ± 2.64 kg/m$^2$). Recruitment was made by convenience in two gyms in the Lisbon area, according to the following inclusion criteria: volunteers aged between 20 and 45, apparently healthy, free of any injury, and with no other contraindication for exercise, and with at least three months of uninterrupted RT experience (with a minimum of one training session per week). The previous exercise experience recruitment criterion was included to ensure proper technique in the free weight exercises of the intervention (e.g., back squat), particularly when reaching muscle concentric failure. All participants read and signed an informed consent form before the study commencement. This study was approved by the ethics committee of the Faculty of Physical Education and Sport, Lusófona University, Lisbon, Portugal (protocol code: 001/2020, approval date: 28 September 2020) and was developed according to the Helsinki Declaration and its later amendments.

### *Measures*

#### *Affective Valence*

The Feeling Scale (FS; Hardy and Rejeski, 1989) was used to assess core affective valence during the exercise session. This 11-point bipolar scale ranges from −5 ("Very bad") to +5 ("Very good") and has been extensively used to assess affective phenomena in the dimensional approach of affect research, also in exercise (Ekkekakis, 2013; Rhodes and Kates, 2015). Recommendations for the utilization of the FS in RT were followed (Andrade et al., 2022; Bastos et al., 2023).

#### *Enjoyment*

Exercise enjoyment was measured with an 8-item questionnaire (e.g., "Is it fun?") previously used for enjoyment measurement (Rodrigues et al., 2020; Teques et al., 2020). The item stem asked respondents how they felt at the moment about the physical activity they had been doing, with the answers being given on a 7-point Likert scale ranging from 1 ("Totally disagree") to 7 ("Totally

agree"). The internal consistency of this scale was deemed excellent across the three time-point assessments (start $\alpha$ = 0.93; end $\alpha$ = 0.91; 24 h after $\alpha$ = 0.94).

*Repetitions in Reserve*

The repetitions in the reserve-based rating of perceived exertion scale (RPE-RIR; Zourdos et al., 2016) were used to measure how close the participants were to muscle concentric failure in the last repetition of a set. This scale consists of 10 points, each with repetitions in the reserve descriptor (e.g., a rating of seven has a description of three repetitions remaining), and was created specifically for RT applications.

***Design and Procedures***

Participants took part in two experimental sessions. During the first one, they were familiarized with the FS and the RPE-RIR. This session started with the completion of the study questionnaires followed by a general warm-up on a treadmill (five to seven minutes of low to moderate intensity running), one set of 12 repetitions in six RT exercises (lat pulldown, back squat, barbell bench press, deadlift, dumbbell shoulder press, and leg extension exercise), and, lastly, a warm-down stage back on the treadmill (two minutes of low intensity walking). The exercise cadence was 2:2 (2 s of duration for both concentric and eccentric phases), with a rest interval of three minutes between exercises. Following recent recommendations (Andrade et al., 2022; Bastos et al., 2023), the FS was applied immediately after each set. Data from the first session were not used for statistical analysis, but rather to provide prior training with the FS before the second session. The RPE-RIR was also applied after each set to measure the proximity to muscle failure to facilitate the necessary load and effort adjustments for the following session.

The second session followed the same exercise structure as the first one, but with three sets for each RT exercise and a 90-s rest interval between them (the rest interval between subsequent exercises remained at three minutes). The FS was applied after warm-up termination, immediately after each exercise's third and final set, and after the warm-down stage. The RPE-RIR was applied after each set to enable the necessary load adjustments to reach muscle concentric failure in the third and final set. A target of reaching set failure in the 12$^{th}$ repetition was always attempted, but a range of eight to 14 repetitions was considered acceptable due to some inter-subject variability being expected (Halperin et al., 2022). This allowed for a load of approximately 70% of one repetition maximum, which was aligned with international recommendations for the threshold between moderate and vigorous intensity in RT (American College of Sports Medicine, 2021). Enjoyment was measured before, after, and approximately 24 hours after the second session.

A thorough explanation of the core affective valence construct was made during the warm-up stage of both sessions. The scale was presented to the participants (and every time it was applied during the session thereafter), the standardized instructions and item stems were described, and various examples were given to illustrate what the FS was intended to assess, followed by the establishment of individual anchoring examples for the extreme items of the scale. Lastly, no encouragement was provided to the participants to enable standardization of the experimental conditions. Three researchers trained in the application of the psychometric instruments performed the data collection. All training and familiarization procedures with the FS and the RPE-RIR followed psychometric recommendations from the literature (e.g., Duda, 1998; Haile et al., 2015).

***Statistical Analysis***

IBM SPSS version 27.0. was utilized to conduct all statistical analyses. Descriptive and correlational analyses were conducted for all studied variables. Normality and homoscedasticity were verified with the Shapiro-Wilk ($n < 50$) and Levene's tests. For all tests, the significance level to reject the null hypothesis was set at 5%. The peak high and the peak low of each participant's affective response were determined. To assess the influence of the global affective response to the session, the individual FS mean (i.e., the average of all the reported affective responses) and the slope (i.e., with a regression analysis including all reported affective responses) were determined. Linear regression analyses were conducted to evaluate the predictive value of FS peaks, the FS end, the FS mean, and the FS slope for post-exercise and 24 hours after enjoyment. The

enjoyment values for both time points consisted of the sum of each participant´s scores for the 8-item questionnaire. Separate analyses were performed for all variables, followed by hierarchical regressions with three blocks: (1) FS peaks and the FS end, (2) the FS slope, and (3) the FS mean. In these, the Durbin-Watson test was used to check for autocorrelation, and the Variation Inflation Factor (VIF) was measured to test for multicollinearity (values over the 5.0 threshold implied high correlation between variables).

## Results

Descriptive statistics and correlation analyses are presented in Table 1. Briefly, post-exercise enjoyment was positively correlated with the FS end ($r = 0.41$; $p < 0.01$), while 24-h enjoyment was positively correlated with all FS variables, the highest being the FS mean ($r = 0.41$; $p < 0.01$).

Individual linear regression scores are presented in Table 2, and the hierarchical regression scores can be observed in Table 3. Individual analyses indicated that the FS end was the only variable that significantly predicted post-exercise enjoyment, accounting for 15% of the variance ($F(1, 41) = 8.13$, $p < 0.01$, $\beta = 0.41$, $t = 2.85$). The hierarchical model testing FS peaks and the FS end presented an $F(3, 39) = 2.82$, $p = 0.051$, and only the FS end accounted significantly for these results ($p = 0.015$). This model explained 12% of the adjusted variance, with the addition of the FS slope (block 2) and the FS mean (block 3) lowering the predictive value to 8%.

Regarding 24 h after enjoyment, all FS variables demonstrated a significant predictive value in the individual analyses. The hierarchical model testing FS peaks and the FS end demonstrated a significant predictive value ($F(3, 39) = 3.57$, $p < 0.05$). The addition of the FS slope ($F(4, 38) = 3.25$, $p < 0.05$) and the FS mean ($F(5, 37) = 2.58$, $p < 0.05$) to the hierarchical model was also significant, but failed to significantly add to the variance explained. Together, FS peaks and the FS end explained 16% of the adjusted variance, with the addition of the FS slope raising it to 18% and the addition of the FS mean lowering it back to 16% while simultaneously demonstrating multicollinearity issues (VIF = 5.9). All other data presented no multicollinearity problems.

**Table 1.** Descriptive and correlational analysis of the affective variables.

| | M | SD | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Age (years) | 34.69 | 6.71 | | | | | | | |
| BMI (kg/m$^2$) | 24.26 | 2.64 | | | | | | | |
| Experience (years) | 8.32 | 4.54 | | | | | | | |
| | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. FS peak low (−5–5) | 0.53 | 1.89 | 1 | | | | | | |
| 2. FS peak high (−5–5) | 4.26 | 0.79 | 0.42* | 1 | | | | | |
| 3. FS end (−5–5) | 3.11 | 1.27 | 0.32* | 0.26 | 1 | | | | |
| 4. FS mean (−5–5) | 2.76 | 1.23 | 0.71** | 0.77** | 0.27 | 1 | | | |
| 5. FS slope | −0.10 | 0.40 | 0.31* | 0.52** | −0.02 | 0.65** | 1 | | |
| 6. Pre enjoyment (8–56) | 43.70 | 7.39 | 0.31* | 0.38* | 0.35* | 0.41** | 0.27 | 1 | |
| 7. Post enjoyment (8–56) | 46.28 | 6.51 | 0.11 | 0.20 | 0.41** | 0.18 | 0.00 | 0.81** | 1 |
| 8. 24h enjoyment (8–56) | 43.00 | 7.74 | 0.31* | 0.36* | 0.36* | 0.41** | 0.32* | 0.94** | 0.79** |

*Note: M = mean, SD = standard deviation, BMI = body mass index, FS = feeling scale, * p < 0.05, ** p < 0.01*

**Table 2.** Linear regression analysis predicting enjoyment post and 24 h after the intervention.

| Dependent variable | Predictor variable | *b* (SE) | *β* | *t* | Adj $R^2$ |
|---|---|---|---|---|---|
| Post-enjoyment | FS peak low | 0.39 (0.53) | 0.11 | 0.73 | −0.01 |
| | FS peak high | 1.64 (1.26) | 0.20 | 1.30 | 0.02 |
| | FS end | 2.09 (0.73) | 0.41 | 2.85** | 0.15 |
| | FS mean | 0.93 (0.81) | 0.18 | 1.14 | 0.01 |
| | FS slope | −0.02 (2.52) | 0.00 | −0.01 | −0.02 |
| 24-h enjoyment | FS peak low | 1.26 (0.61) | 0.31 | 2.08* | 0.07 |
| | FS peak high | 3.44 (1.43) | 0.35 | 2.40* | 0.10 |
| | FS end | 2.22 (0.89) | 0.36 | 2.49* | 0.11 |
| | FS mean | 2.58 (0.89) | 0.41 | 2.88** | 0.15 |
| | FS slope | 6.08 (2.84) | 0.32 | 2.14* | 0.08 |

*Note: FS = feeling scale, * p < 0.05, ** p < 0.01, β = beta estimated coefficient*

**Table 3.** Hierarchical regression analysis predicting enjoyment post and 24 h after the intervention

| Predictor variable | Post-enjoyment | | | | 24-h enjoyment | | | |
|---|---|---|---|---|---|---|---|---|
| | Adj $R^2$ | $\Delta R^2$ | *β* | *t* | Adj $R^2$ | $\Delta R^2$ | *β* | *t* |
| Block 1: | 0.12 | 0.18 | | | 0.16 | 0.22 | | |
| FS peak low | | | −0.07 | −0.40 | | | 0.13 | 0.80 |
| FS peak high | | | 0.12 | 0.77 | | | 0.23 | 1.46 |
| FS end | | | 0.40 | 2.56* | | | 0.26 | 1.73 |
| Block 2: | 0.09 | 0.00 | | | 0.18 | 0.04 | | |
| FS peak low | | | −0.06 | −0.33 | | | 0.09 | 0.55 |
| FS peak high | | | 0.15 | 0.81 | | | 0.11 | 0.62 |
| FS end | | | 0.39 | 2.39* | | | 0.31 | 2.03* |
| FS slope | | | −0.05 | −0.30 | | | 0.24 | 1.42 |
| Block 3: | 0.08 | 0.01 | | | 0.16 | 0.00 | | |
| FS peak low | | | −0.14 | −0.58 | | | 0.02 | 0.09 |
| FS peak high | | | 0.07 | 0.30 | | | 0.04 | 0.18 |
| FS end | | | 0.38 | 2.34* | | | 0.31 | 1.98 |
| FS slope | | | −0.10 | −0.50 | | | 0.20 | 1.00 |
| FS mean | | | 0.18 | 0.50 | | | 0.45 | 0.66 |

*Note: FS = feeling scale, * p < 0.05, β = beta estimated coefficient*

## Discussion

The objective of this study was to explore the predictive value of the peak-and-end rule on enjoyment levels of a commonly prescribed and evidence-based RT session. This study provides some novelty for affect research by analyzing the predictive value of the complete peak-and-end rule (i.e., peaks and end affect) for exercise enjoyment in two distinct time points, adding to previous research focused on the session's "close-to-the-end" affect (through different intensity manipulations; Hutchinson et al., 2020, 2023; Zenko et al., 2016), or on remembered affect as the outcome of the intervention (Hargreaves and Stych, 2013).

Our results suggest that taking into account the highest, the lowest, and the final affective response of an exercise session may be relevant for enjoyment promotion. However, only the session's end affect presented consistent predictive value throughout the analysis. Indeed, the individual linear regressions demonstrated that the FS end was the only variable capable of predicting both post-exercise (15%) and 24 h after (11%) enjoyment. The hierarchical model for post-exercise enjoyment followed the same trend, exhibiting a predictive value of 12% that was accounted only by the FS end (and thus, rendering additional variables in the tested models unnecessary). Although the results of the affective peaks regarding 24 h after enjoyment (i.e., individually and in the hierarchical model) are promising (e.g., a predictive value of 16% in the hierarchical model, which is slightly superior to the individual FS end at 11%), they can be considered insufficient to make strong deductions. The link between the pleasure or displeasure one feels specifically at the end of exercise and enjoyment has already been demonstrated by Hutchinson et al. (2020), with a measure of ending exercise affect being more strongly correlated with enjoyment after RT than the session's affective slope or mean. These results are encouraging to promote enjoyable RT experiences because end affect can be considered relatively simple to manipulate. For example, adjusting an exercise session to elicit a more positive FS mean (which demonstrated a predictive value only for 24 h after enjoyment) implies attempting to improve the pleasantness of the entire session, while creating a more pleasurable end of the exercise experience appears to be more feasible given the usual structure of a session (i.e., cool-down).

Regarding the FS slope and the FS mean, both variables were inconsistent in individual analyses and did not add significantly to the hierarchical models. The inability of these global affective response variables to add further explanatory value to both models is aligned with the peak-and-end rule's theoretical background, which postulates that perceptions of an experience tend to be biased towards the most intense moments of pleasure and/or displeasure and how the episode ended, rather than by the totality of the affective response (Fredrickson, 2000; Kahneman et al., 1993). Notwithstanding, previous research has demonstrated that both the FS mean and the FS slope are correlated with enjoyment and remembered pleasure (in RT; Hutchinson et al., 2020) and that the FS slope (but not the FS mean) can significantly predict these same dependent variables (in aerobic exercise; Zenko et al., 2016). This leaves suggestions that both the affective slope and the mean affective response of exercise may be variables of interest for retrospective affective evaluations, but do not significantly add to the peak-and-end rule hierarchical model designed to predict exercise enjoyment.

One of the strengths of the present study is its ecological value. By conducting the experiment in health clubs and following international recommendations for an RT session (American College of Sports Medicine, 2021), this intervention was considerably closer to a real-life context/situation. Furthermore, the application of these recommendations included the implementation of a warm-up and a cool-down stage with light-to-moderate aerobic exercise, allowing for a broader understanding of the affective dynamics of a typical RT session (vs. only analyzing the fundamental stage of the session with a specific intensity manipulation). This is important when operationalizing the peak-and-end rule. First, in the fundamental stage of the session, the professional should measure the affective response frequently enough to ensure adequate identification of the higher and lower affective moments (Bastos et al., 2022, 2023). New exercises for the participant (which can be considered uncharted affective territory) and sets with vigorous intensity are examples of moments

that should not go unmeasured (in the event of high intensity, applying it early in the session might be preferable) (Hutchinson et al., 2020, 2023). Secondly, the low-intensity nature of the cool-down stage should be considered for the end affect assessment and interpretation, and can be used to facilitate the prescription of a pleasurable activity.

Considering the results of the present study, practitioners should be aware that the affective response at the end of the exercise session can influence an individual's perception of exercise enjoyment. Accordingly, adjusting one's exercise prescription to elicit a more pleasurable end affect could be an effective strategy to promote a more positive post-exercise enjoyment. This can be accomplished by prescribing low-intensity exercise activities in the cool-down phase. The light aerobic exercise implemented in the present study's protocol is an example of how to operationalize this. Another possibility is to finish the cool-down with light stretches (e.g., Teixeira et al., 2024) or to perform additional RT sets with lighter loads and lower effort.

This study is not without limitations. The fact that enjoyment is the only measured outcome of interest is one of them. Although this can be considered appropriate for a novel exploratory study, future research should further explore the peak-and-end rule's relationship with other affect-related variables and objective exercise behavior (e.g., exercise frequency). Another recommendation for future research pertains to trying to replicate these results with less experienced individuals due to their higher risk of the exercise dropout (Sperandei et al., 2016) and usually lower levels of perceived exercise enjoyment.

## Conclusions

Overall, the session's end affect exhibited the most consistent predictive value for exercise enjoyment in a commonly prescribed and evidence-based RT session. Also, results demonstrated that the affective peaks slightly increased the explanatory power regarding enjoyment 24 h after exercise, but failed to do so for post-exercise enjoyment. Future research should further explore the predictive power of the peak-and-end rule in other exercise behavior variables of interest.

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