

Understanding Goal Setting and Goal Achievement Among Individuals Living with HIV Involved in an Online Community-Based Exercise Intervention Study

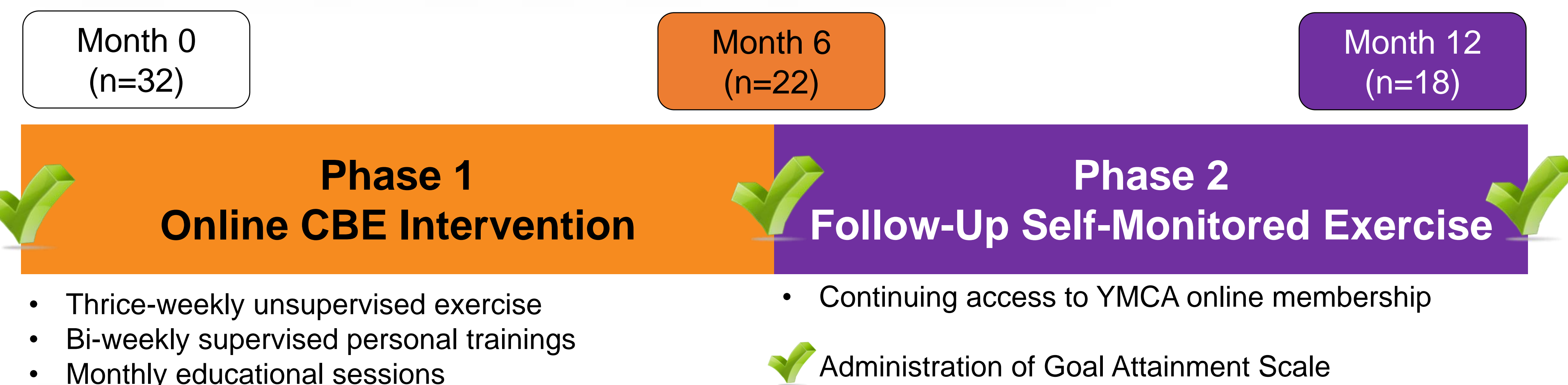
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Objectives: To explore the nature and extent of goal setting and goal achievement among adults living with HIV involved in an online community-based exercise (CBE) study.

Methods

Timeline of Online CBE Intervention and Assessments



Participants

- Adults living with HIV in a two-phased online CBE study in Toronto, Canada

Measurements

- Goal Attainment Scale (GAS) to assess goal setting and achievement
 - Administered via Zoom with research coordinator who was a physiotherapist
 - Participants first set goals and reported their corresponding levels of importance and difficulty (at Month 0 and 6), followed by an assessment of goal achievement in the subsequent evaluation (at Month 6 and 12)
- Baseline demographic questionnaire to capture individual characteristics

GAS Score Calculation

$$\text{GAS T Score} = 50 + \frac{10\sum w_i x_i}{\sqrt{(1-\rho)\sum w_i^2 + \rho(\sum w_i)^2}}$$

where i = the i th goal stated by the participant (participants were unrestricted in the number of goals they can articulate)
 X_i = the level of function or achievement for the i th goal; W_i = the weight assigned to the i th goal (weight = importance X difficulty)
 $\rho = 0.3$ was used in this study; Higher GAS T scores indicate higher function with respect to the goals at baseline or better achievement of goals compared to expectations after intervention

Analytic Strategies

- Descriptive statistics to report number and extent of goals stated and achieved
- Text analysis to categorize types of goal stated and achieved at each time point

Table 1. Baseline participant characteristics (n=32)

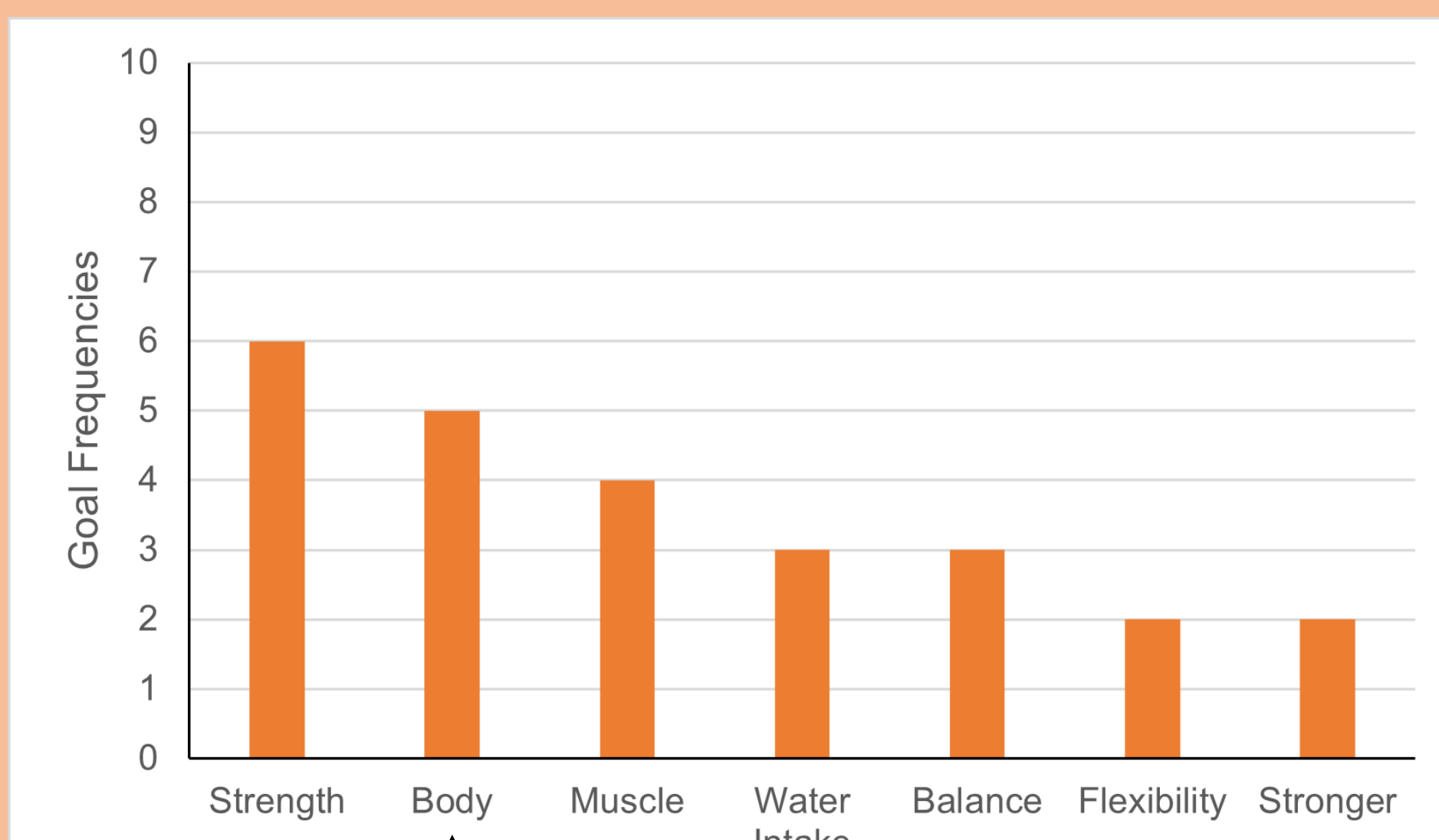
Participant characteristics	Median [P25, P75] / n (%)
Age (years)	53 [43, 60]
Gender (n)	
Men	22 (69%)
Women	9 (28%)
Race/Ethnicity	
White	14 (44%)
Black or African	8 (25%)
Completed university education or higher	13 (41%)
Living alone (n)	12 (43%)
Employed (n)	15 (47%)
Number of comorbidities	3 [1, 6]
Year of HIV diagnosis	2002 [1992, 2010]
Current use of antiretroviral medications	32 (100%)

Notes: P25 = 25th percentile. P75 = 75th percentile.

Figure 1a. Most frequently stated goals at Month 0 (n=32)



Figure 1b. Most frequently achieved goals at Month 6 (n=22)



"Body" encompasses achieving desired body shape, returning to ideal body image, and increasing body strength.

Figure 2a. Most frequently stated goals at Month 6 (n=22)

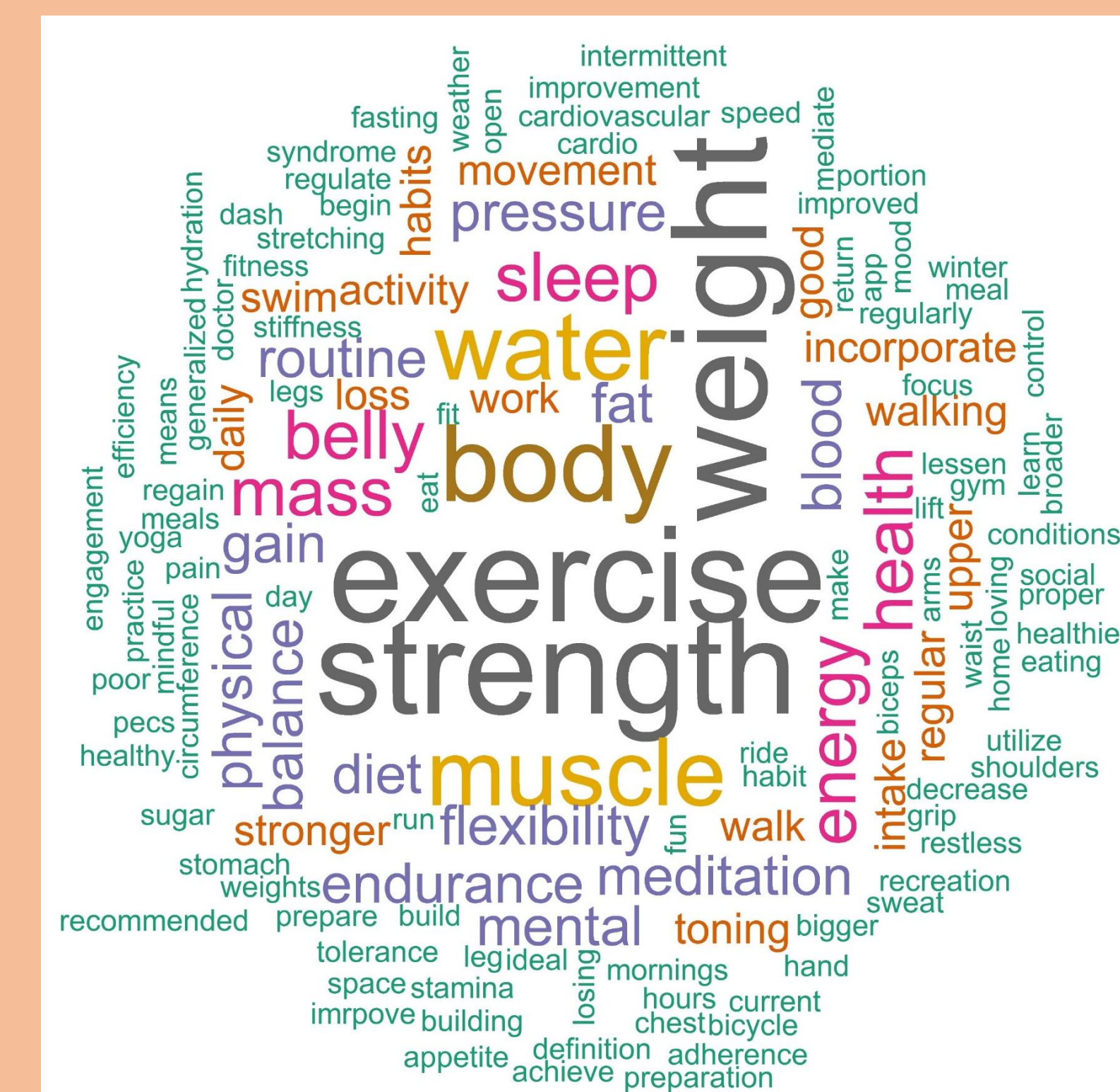
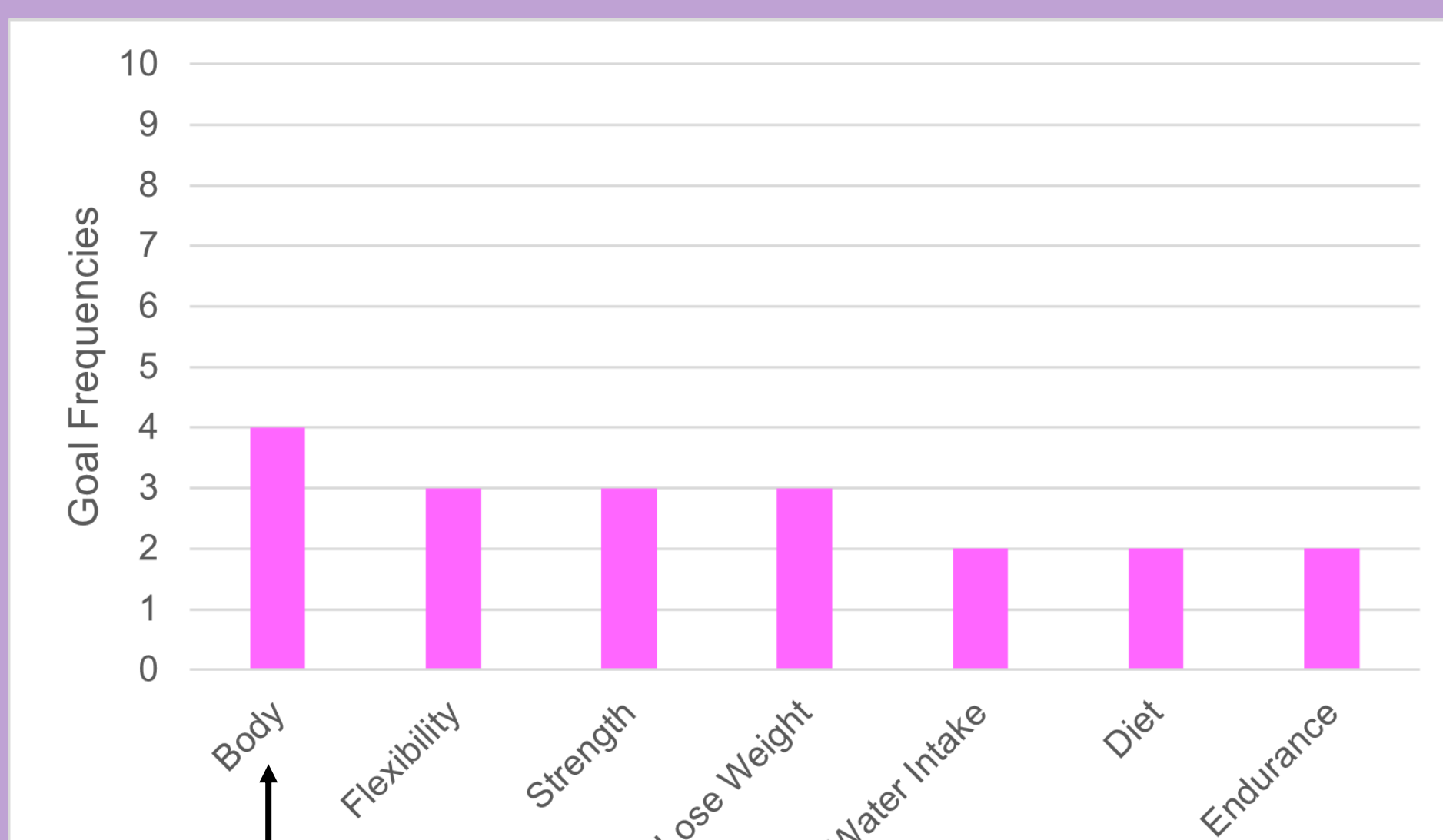


Figure 2b. Most frequently achieved goals at Month 12 (n=17)



"Body" encompasses decreasing body fat, increasing body strength, and returning to ideal body image.

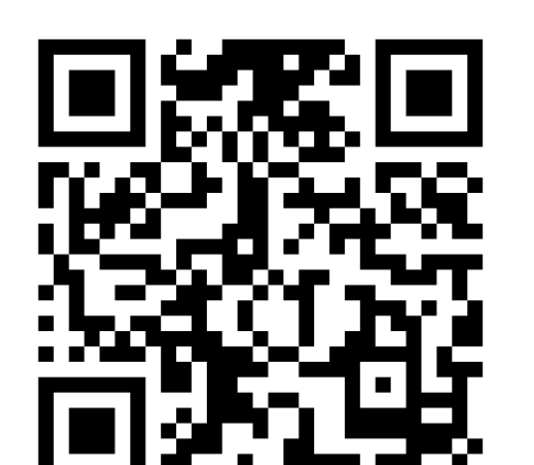
Table 2. Goal setting and goal achievement at each study phase

	Month 0 → 6	Month 6 → 12
	Mean ± SD / Median [P25, P75]	
GAS baseline score	35.8 ± 1.9	33.3 ± 5.4
GAS achieved score	47.6 ± 9.6	49.8 ± 10.4
Number of goals stated	4 [3, 4]	4 [3, 5]
Number of goals achieved	2 [1, 3]	2 [1, 3]
Achievement rate (%)	45.9 ± 32.9	47.4 ± 35.6

Discussion and Implications

- Strength, body weight, and exercise were the most frequently stated goals by participants involved in this online CBE intervention study.
- Findings may help to inform collaborative goal setting and personalized exercise programs and interventions for adults living with HIV.

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Online CBE Study Protocol