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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 1. ADOPT Psychosocial, Behavioral and Environmental Predictors of Response** | | | **TIME POINT OBTAINED** | | | | |
| **Questionnaire to be Used** | **Time (mm:ss)** | **Construct Measured** | **0** | **13** | **26** | **52** | **78** |
| **Psychosocial** |  |  |  |  |  |  |  |
| PANAS-Modified for IMF (1, 2) | 01:35 | positive and negative affect | x | *x* | x | x | x |
| Perceived Stress Scale (PSS) (3-5) | 01:32 | perceived stress | x | *x* | x | x | x |
| PEMS (6, 7) | 01:33 | eating motives | x | *x* | x | x | x |
| Binge Eating Scale (BES)(8) | 03:21 | binge eating | x | *x* | x | x | x |
| RED (9) | 01:01 | reward based eating drive | x | *x* | x | x | x |
| Three Factor Eating Questionnaire (TFEQ R 18)(10) | 1:32 | restrained eating, uncontrolled eating, emotional eating | x | *x* | x | x | x |
| BREQ-3 (11, 12) | 01:17 | motivation for exercise | x | *x* | x | x | x |
| Grit (13) | <1:00 | perseverance and passion | x |  |  |  |  |
| TSRQ-Baseline (14) | 01:37 | motivation to start treatment | x |  |  |  |  |
| TSRQ-Follow-Up (14) | 01:00 | motivation to continue treatment |  | *x* | x | x | x |
| Mini-IPIP (15) | 01:26 | personality | x |  |  | x |  |
| BARSE (16) | 01:00 | exercise self-efficacy | x | *x* | x | x | x |
| WEL-SF (17) | 00:30 | diet self-efficacy | x | *x* | x | x | x |
| POMS (40-item) (18) | 00:40 | mood | x | *x* | x | x | x |
| RAND-36 (19, 20) | 02:30 | health-related quality of life | x |  | x | x | x |
| Life Events Questionnaire (LEQ) (21, 22) | 02:00 | stressful life events (past 6 mo) | x |  | x | x | x |
| Behavior Based Identity (23) | 01:00 | identity | x | *x* | x | x | x |
| Role/Group-Based Identity Congruence (23) | 07:00 | identity congruence | x | *x* | x | x | x |
| Emotion Regulation (23) | 02:00 | emotion regulation | x | *x* | x | x | x |
| Psychological Well-Being (23) | 05:00 | well-being | x | *x* | x | x | x |
| Attributional Style (23) | 08:00 | attribution of events | x | *x* | x | x | x |
| Implicit Theory (23) | 01:00 | beliefs about weight | x | *x* | x | x | x |
| Intervention Preference Baseline [study specific] | <1:00 | intervention preference | x |  |  |  |  |
| Intervention Preference Follow Up [study specific] | <1:00 | intervention preference |  | *x* | x | x | x |
| Body Perception Questionnaire-Short Form (BPQ) (24). | <1:00 | subjective body awareness and autonomic reactivity | x | x | x | x | x |
| Modified Yale Food Addiction Scale V2 (mYFAS) (25) | 2:00 | Additive-like eating behavior | x |  | x | x | x |
| Highly Processed Food Withdrawal Scale (ProWS)\*\*(26) | 3:00 | Processed food withdrawal\* |  |  |  |  |  |
| Life History Questionnaire [study specific] | 2:30 | perceived SES, developmental history | x\* |  |  |  |  |
| Traumatic Antecedents Questionnaire (TAQ)(27)\* | 10:00 | History of past trauma | x\* |  |  |  |  |
| **Behavioral** |  |  |  |  |  |  |  |
| EARLY eating away from home Q (28) | 00:51 | frequency of eating away from home | x |  | x | x | x |
| EARLY SSB Consumption Q (28) | 00:32 | consumption of sugar-sweetened beverages | x |  | x | x | x |
| BRFSS Alcohol Consumption (29) | 01:13 | alcohol consumption | x |  | x | x | x |
| Global PAQ, with show cards (30, 31) | 03:09 | physical activity | x | *x* | x | x | x |
| Munich Chronotype Q (MCTQ) (32) | 04:30 | sleep | x | *x* | x | x | x |
| Marijuana Use (DFAW-CU) (33) | 04:05 | marijuana use | x |  |  |  |  |
| BRFSS Marijuana Use (34) | <1:00 | marijuana use |  |  | x | x | x |
| 12-Month Study Questionnaire [study specific] | 4:00 | end of intervention questionnaire |  |  |  | x |  |
| **Environmental** |  |  |  |  |  |  |  |
| NEWS-A (35, 36) | 04:38 | neighborhood walkability | x |  |  |  |  |
| Social Support for Healthy Behaviors (37) | 3:30 | perceived social support for healthy eating and PA | x | x | x | x | x |
| **Estimated Time all Outcome Questionnaires at each Time Point (hr:min)** | | | 1:15 | 1:05 | 1:05 | 1:21 | 1:07 |
| **Task Based Measures of Executive Function (to be included within Psychosocial Domain)** | | | | | | | |
| Computerized task based assessment | ~20:00 | working memory | x | x | x | x | x |
| Computerized task based assessment | ~20:00 | shifting | x | x | x | x | x |
| Computerized task based assessment | ~20:00 | inhibition | x | x | x | x | x |
| Computerized task based assessment | ~2:00 | delay discounting | x | *x* | x | x | x |
| UPPS+P scale(38) | ~2:00 | impulsivity | x |  |  |  |  |
| **Estimated Time for all Executive Function Measures at each Time Point (hr:min)** | | | 1:00 | 1:00 | 1:00 | 1:00 | 1:00 |

References

1. Mano H, Oliver RL. Assessing the Dimensionality and Structure of the Consumption Experience - Evaluation, Feeling, and Satisfaction. J Consum Res. 1993;20(3):451-66. doi: Doi 10.1086/209361. PubMed PMID: WOS:A1993MM42600008.

2. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: the PANAS scales. J Pers Soc Psychol. 1988;54(6):1063-70. PubMed PMID: 3397865.

3. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. J Health Soc Behav. 1983;24(4):385-96. PubMed PMID: 6668417.

4. Jarvela-Reijonen E, Karhunen L, Sairanen E, Rantala S, Laitinen J, Puttonen S, et al. High perceived stress is associated with unfavorable eating behavior in overweight and obese Finns of working age. Appetite. 2016;103:249-58. doi: 10.1016/j.appet.2016.04.023. PubMed PMID: WOS:000378666500031.

5. Lee EH. Review of the psychometric evidence of the perceived stress scale. Asian Nurs Res (Korean Soc Nurs Sci). 2012;6(4):121-7. doi: 10.1016/j.anr.2012.08.004. PubMed PMID: 25031113.

6. Boggiano MM, Wenger LE, Turan B, Tatum MM, Sylvester MD, Morgan PR, et al. Real-time sampling of reasons for hedonic food consumption: further validation of the Palatable Eating Motives Scale. Front Psychol. 2015;6:744. doi: 10.3389/fpsyg.2015.00744. PubMed PMID: 26082744; PubMed Central PMCID: PMCPMC4450168.

7. Burgess EE, Turan B, Lokken KL, Morse A, Boggiano MM. Profiling motives behind hedonic eating. Preliminary validation of the Palatable Eating Motives Scale. Appetite. 2014;72:66-72. doi: 10.1016/j.appet.2013.09.016. PubMed PMID: 24076018.

8. Duarte C, Pinto-Gouveia J, Ferreira C. Expanding binge eating assessment: Validity and screening value of the Binge Eating Scale in women from the general population. Eat Behav. 2015;18:41-7. Epub 2015/04/17. doi: 10.1016/j.eatbeh.2015.03.007. PubMed PMID: 25880043.

9. Mason AE, Vainik U, Acree M, Tomiyama AJ, Dagher A, Epel ES, et al. Improving Assessment of the Spectrum of Reward-Related Eating: The RED-13. Front Psychol. 2017;8:795. doi: 10.3389/fpsyg.2017.00795. PubMed PMID: 28611698; PubMed Central PMCID: PMCPMC5447741.

10. Cappelleri JC, Bushmakin AG, Gerber RA, Leidy NK, Sexton CC, Lowe MR, et al. Psychometric analysis of the Three-Factor Eating Questionnaire-R21: results from a large diverse sample of obese and non-obese participants. Int J Obes (Lond). 2009;33(6):611-20. Epub 2009/04/29. doi: 10.1038/ijo.2009.74. PubMed PMID: 19399021.

11. Markland D, Tobin V. A modification of the Behavioral Regulation in Exercise Questionnaire to include an assessment of amotivation. J Sport Exercise Psy. 2004;26:191-6.

12. Wilson PM, Rodgers WM, Loitz CC, Scime G. “It's Who I Am … Really!’ The Importance of Integrated Regulation in Exercise Contexts1. Journal of Applied Biobehavioral Research. 2006;11(2):79-104. doi: 10.1111/j.1751-9861.2006.tb00021.x.

13. Duckworth AL, Quinn PD. Development and validation of the short grit scale (grit-s). J Pers Assess. 2009;91(2):166-74. doi: 10.1080/00223890802634290. PubMed PMID: 19205937.

14. Levesque CS, Williams GC, Elliot D, Pickering MA, Bodenhamer B, Finley PJ. Validating the theoretical structure of the Treatment Self-Regulation Questionnaire (TSRQ) across three different health behaviors. Health Education Research. 2007;22(5):691-702. doi: 10.1093/her/cyl148. PubMed PMID: WOS:000250009000009.

15. Donnellan MB, Oswald FL, Baird BM, Lucas RE. The Mini-IPIP scales: Tiny-yet-effective measures of the big five factors of personality. Psychological Assessment. 2006;18(2):192-203. doi: 10.1037/1040-3590.18.2.192. PubMed PMID: WOS:000238320900007.

16. McAuley E. The role of efficacy cognitions in the prediction of exercise behavior in middle-aged adults. Journal of behavioral medicine. 1992;15(1):65-88. PubMed PMID: 1583674.

17. Ames GE, Heckman MG, Grothe KB, Clark MM. Eating self-efficacy: Development of a short-form WEL. Eat Behav. 2012;13(4):375-8. doi: 10.1016/j.eatbeh.2012.03.013. PubMed PMID: WOS:000312054500015.

18. Grove JR, Prapavessis H. Preliminary Evidence for the Reliability and Validity of an Abbreviated Profile of Mood States. Int J Sport Psychol. 1992;23(2):93-109. PubMed PMID: WOS:A1992JP57600001.

19. Hays RD, Morales LS. The RAND-36 measure of health-related quality of life. Ann Med. 2001;33(5):350-7. PubMed PMID: 11491194.

20. Hays RD, Sherbourne CD, Mazel RM. The RAND 36-Item Health Survey 1.0. Health Econ. 1993;2(3):217-27. PubMed PMID: 8275167.

21. Norbeck JS. Modification of Life Event Questionnaires for Use with Female Respondents. Res Nurs Health. 1984;7(1):61-71. doi: DOI 10.1002/nur.4770070110. PubMed PMID: WOS:A1984SH29600009.

22. Sarason IG, Johnson JH, Siegel JM. Assessing Impact of Life Changes - Development of Life Experiences Survey. Journal of consulting and clinical psychology. 1978;46(5):932-46. doi: Doi 10.1037//0022-006x.46.5.932. PubMed PMID: WOS:A1978FT88200015.

23. Caldwell AE. Unpublished measures. 2018.

24. Cabrera A, Kolacz J, Pailhez G, Bulbena-Cabre A, Bulbena A, Porges SW. Assessing body awareness and autonomic reactivity: Factor structure and psychometric properties of the Body Perception Questionnaire-Short Form (BPQ-SF). Int J Methods Psychiatr Res. 2017. doi: 10.1002/mpr.1596. PubMed PMID: 29193423.

25. Schulte EM, Gearhardt AN. Development of the Modified Yale Food Addiction Scale Version 2.0. Eur Eat Disord Rev. 2017;25(4):302-8. Epub 2017/04/04. doi: 10.1002/erv.2515. PubMed PMID: 28370722.

26. Schulte EM, Smeal JK, Lewis J, Gearhardt AN. Development of the Highly Processed Food Withdrawal Scale. Appetite. 2018;131:148-54. Epub 2018/09/19. doi: 10.1016/j.appet.2018.09.013. PubMed PMID: 30227182.

27. Herman JL, Perry JC, van der Kolk BA. Childhood trauma in borderline personality disorder. Am J Psychiatry. 1989;146(4):490-5. Epub 1989/04/01. doi: 10.1176/ajp.146.4.490. PubMed PMID: 2929750.

28. Nelson MC, Lytle LA. Development and evaluation of a brief screener to estimate fast-food and beverage consumption among adolescents. Journal of the American Dietetic Association. 2009;109(4):730-4. doi: 10.1016/j.jada.2008.12.027. PubMed PMID: 19328271; PubMed Central PMCID: PMCPMC2727452.

29. (CDC) CfDCaP. Behavioral Risk Factor Surveillance System Survey Questionnaire. In: Services USDoHaH, editor. Atlanta, Georgia2016. p. 26-7.

30. Chu AH, Ng SH, Koh D, Muller-Riemenschneider F. Reliability and Validity of the Self- and Interviewer-Administered Versions of the Global Physical Activity Questionnaire (GPAQ). PLoS One. 2015;10(9):e0136944. doi: 10.1371/journal.pone.0136944. PubMed PMID: 26327457; PubMed Central PMCID: PMCPMC4556683.

31. Cleland CL, Hunter RF, Kee F, Cupples ME, Sallis JF, Tully MA. Validity of the global physical activity questionnaire (GPAQ) in assessing levels and change in moderate-vigorous physical activity and sedentary behaviour. BMC public health. 2014;14:1255. doi: 10.1186/1471-2458-14-1255. PubMed PMID: 25492375; PubMed Central PMCID: PMCPMC4295403.

32. Roenneberg T, Wirz-Justice A, Merrow M. Life between clocks: Daily temporal patterns of human chronotypes. J Biol Rhythm. 2003;18(1):80-90. doi: 10.1177/0748730402239679. PubMed PMID: WOS:000180630100009.

33. Cuttler C, Spradlin A. Measuring cannabis consumption: Psychometric properties of the Daily Sessions, Frequency, Age of Onset, and Quantity of Cannabis Use Inventory (DFAQ-CU). PLoS One. 2017;12(5):e0178194. doi: 10.1371/journal.pone.0178194. PubMed PMID: 28552942; PubMed Central PMCID: PMCPMC5446174.

34. (CDC) CfDCaP. Behavioral Risk Factor Surveillance System Survey Questionnaire. In: Services USDoHaH, editor. Atlanta, Georgia2016. p. 51.

35. Cerin E, Conway TL, Saelens BE, Frank LD, Sallis JF. Cross-validation of the factorial structure of the Neighborhood Environment Walkability Scale (NEWS) and its abbreviated form (NEWS-A). Int J Behav Nutr Phys Act. 2009;6:32. doi: 10.1186/1479-5868-6-32. PubMed PMID: 19508724; PubMed Central PMCID: PMCPMC2700069.

36. Cerin E, Saelens BE, Sallis JF, Frank LD. Neighborhood Environment Walkability Scale: validity and development of a short form. Medicine and science in sports and exercise. 2006;38(9):1682-91. doi: 10.1249/01.mss.0000227639.83607.4d. PubMed PMID: 16960531.

37. Kiernan M, Moore SD, Schoffman DE, Lee K, King AC, Taylor CB, et al. Social support for healthy behaviors: scale psychometrics and prediction of weight loss among women in a behavioral program. Obesity. 2012;20(4):756-64. doi: 10.1038/oby.2011.293. PubMed PMID: 21996661; PubMed Central PMCID: PMCPMC4718570.

38. Cyders MA, Smith GT, Spillane NS, Fischer S, Annus AM, Peterson C. Integration of impulsivity and positive mood to predict risky behavior: development and validation of a measure of positive urgency. Psychol Assess. 2007;19(1):107-18. doi: 10.1037/1040-3590.19.1.107. PubMed PMID: 17371126.