Data Article

Assessing recovery-related behaviors, emotions, and cognitions among members of alcoholics anonymous over 7 days: Quantitative daily diary data

Onawa LaBelle*, Maurissa Hastings

*Corresponding author.
E-mail address: olabelle@uwindsor.ca (O. LaBelle).

**ARTICLE INFO**

Article history:
Received 8 June 2020
Accepted 30 June 2020
Available online 3 July 2020

Keywords:
Alcoholics anonymous
Helping behavior
Gratitude
Self-esteem
Affect
Recovery capital
Narcissism
Daily diary methodology
Time-based sampling

**ABSTRACT**

This was a quantitative daily diary study that consisted of an initial baseline assessment followed by 7 nightly reports collected each evening. Participants were members of Alcoholics Anonymous (N = 113) and were recruited through social media networks (e.g., large recovery-related Facebook groups, twitter, Instagram, etc.), an email list from people in recovery who had previously participated in research, and through the use of snowball sampling. The analyses used in the resultant article was multilevel modeling with daily reports nested within individuals (LaBelle, 2020). These data may be reused for cross-sectional studies to look at relationships among the study variables, or across days to assess individual differences in behavior.

© 2020 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license.

(https://creativecommons.org/licenses/by/4.0/)

https://doi.org/10.1016/j.dib.2020.105983

2352-3409/© 2020 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license.

(https://creativecommons.org/licenses/by/4.0/)
Specifications table

| Subject                          | Psychology (General)                          |
|---------------------------------|-----------------------------------------------|
| Specific subject area           | Positive Psychology, Health Psychology       |
| Type of data                    | Tables                                        |
| How data were acquired          | Self-report through Qualtrics Online Survey Software |
| Data format                     | Raw                                           |
| Parameters for data collection  | Criteria for eligibility: at least 18 years old, sober (abstinent) for at least 90 days, and an active member of Alcoholics Anonymous |
| Description of data collection  | In this daily diary study, data were obtained through time-series sampling over 7 days. Participants reported on specific recovery-related behaviors, emotions, and cognitions each evening at 8 pm after receiving a survey link via text message or email. |
| Data source location            | Ann Arbor, Michigan (University of Michigan)  |
|                                 | United States of America                     |
| Data accessibility              | Repository name: Mendeley Data                |
|                                 | Data identification number: 10.17632/4wd9scvdvk. |
|                                 | Direct URL to data: https://data.mendeley.com/datasets/4wd9scvdvk/3 |
| Related research article        | LaBelle, O. (2020). Daily associations between helping behavior, gratitude, and selflessness in members of Alcoholics Anonymous. Alcoholism Treatment Quarterly. |
|                                 | https://doi.org/10.1080/07347324.2020.1768992  |

Value of the data

- These data provide a novel perspective of the daily behaviors, emotions, and cognitions associated with people in both short-term and long-term recovery from alcohol use disorder.
- Researchers interested in recovery from addiction, recovery processes, personality factors associated with recovery, and who are interested in daily diary and time-series sampling will be interested in this data.
- The data can be used to investigate individual differences in helping behavior, gratitude, hypersensitive narcissism, self-absorption, self-efficacy, social contact, exercise habits, positive/negative affect, and physical activity over a time period of one week. Additionally, measures that assess addiction severity, adult attachment, gratitude, resentment, personality, psychological distress, altruism, social desirability, recovery capital, alcohol-related God locus of control, self-esteem, narcissism, health, spirituality, and religiosity, were collected at baseline.
- The dataset includes open-text answers submitted each night about the high point and low point of the day that could be analyzed qualitatively.

1. Data description

The accompanying SPSS Statistics data file contains 904 columns of the self-report responses of 113 participants. Table 1 lists demographic variables collected with their labels, while Table 2 lists recovery-related variables and labels. An overview of the measures from the baseline survey and the daily surveys can be found in Tables 3 and 4, respectively.

2. Experimental design, materials, and methods

2.1. Participants

The sample consisted of 113 members of Alcoholics Anonymous; full demographic information is presented in Table 5, and recovery-related information is presented in Table 6. Across all participants, the length of time in recovery ranged from 5 months to 39 years (M = 7.63 years, SD = 9.17).
| Column Number | Variable Name | Variable Label | Variable Values |
|---------------|---------------|----------------|----------------|
| 10            | D_Age         | Age            | Open           |
| 11            | D_Gen         | Gender         | 1 = "Male" 2 = "Female" 3 = "Other (details optional)" |
| 12            | D_Race        | Race/Ethnicity | 1 = "Alaskan Native/Native American" 2 = "Asian/Pac Islander" 3 = "Black/African" 4 = "Hispanic/Latino/a" 5 = "Middle Eastern" 6 = "White/Caucasian" 7 = "Other" 8 = "Bi/Multiracial" |
| 14            | D_Ed          | What is the highest level of education you have attained? | 1 = "Some high school" 2 = "GED/High school diploma" 3 = "Some college" 4 = "College degree (BA, BS)" 5 = "Master's degree (MA, MS, MSW)" 6 = "Professional degree (JD, MBA)" 7 = "Doctorate (MD, PhD)" |
| 15            | D_Inc         | What is your average annual income? | 1 = "0–25,000" 2 = "25,000 to 50,000" 3 = "50,000 to 75,000" 4 = "75,000–100,000" 5 = "100,000+" |
| 16            | D_Rel         | What is your relationship status? | 1 = "Single" 2 = "Dating" 3 = "In a relationship" 4 = "Married" 5 = "Separated or divorced" 6 = "Widowed" |
| 17            | D_Health      | In general, how would you rate your health? | 1 = "Excellent" 2 = "Very Good" 3 = "Good" 4 = "Fair" 5 = "Poor" |
| 18            | D_Emp         | Are you employed? | 1 = "Yes, full time" 2 = "No" 3 = "Yes, part time" |

Note. Additional demographic information has been omitted to save space. See full dataset for all available variables.
Table 2
Recovery-Related Variables.

| Column Number | Variable Name | Variable Label | Variable Values |
|---------------|---------------|----------------|-----------------|
| 26            | Q_SobD        | What is your sobriety date? (mm/dd/yyyy format) | Open |
| 27            | D_Add         | What was your main addiction? | 1 = “Alcohol” 2 = “Drugs” |
| 30            | AA_12S        | Are you working the 12-steps with your sponsor? | 1 = “Yes” 2 = “No” |
| 31            | AA_Mtgs_Est   | Number of Weekly Meetings | Open |
| 32            | AA_SpOth      | Are you sponsoring anyone? | 1 = “Yes” 2 = “No” |
| 33            | AA_NumSp      | Number of Sponsees | Open |

Table 3
Overview of baseline measures.

| Column Number | Variable Prefix | Measure | Study Variable | Total Items | Author(s) |
|---------------|-----------------|---------|----------------|-------------|-----------|
| 34–50         | SIP_            | Short Inventory of Problems Scale – Revised<sup>b</sup> | Addiction severity | 17 | Kiluk et al., 2013 |
| 50–62         | ECR_            | Experiences in Close Relationships Scale<sup>e</sup> | Adult attachment style (anxious and avoidant) | 12 | Brennan et al., 1998 |
| 63–75         | NPI_            | Narcissistic Personality Inventory<sup>a</sup> | Narcissism | 13 | Gentile et al., 2013 |
| 76–95         | APS_            | Altruistic Personality Scale<sup>c</sup> | Altruism | 20 | Rushton et al., 1981 |
| 96–111        | GRAT_           | Gratitude, Resentment and Appreciation Test<sup>e</sup> | Trait-level gratitude | 16 | Watkins et al., 2003 |
| 112–121       | TIPI_           | Ten-Item Personality Inventory<sup>c</sup> | Big-5 personality traits | 10 | Gosling et al., 2003 |
| 122–127       | K_G_            | Kessler Psychological Distress Scale<sup>a</sup> | Psychological distress | 6 | Kessler et al., 2002 |
| 128–137       | SDS_            | Social Desirability Scale<sup>a</sup> | Social desirability | 10 | Strahan & Gerbasi, 1972 |
| 138–149       | AGLOC_          | Alcohol-God Locus of Control Scale<sup>d</sup> | Locus of control (over alcoholism) | 12 | Murray et al., 2006 |
| 150–159       | RSE_            | Rosenberg Self-Esteem Scale<sup>e</sup> | Self-esteem | 10 | Rosenberg, 1965 |
| 160–169       | BARC_           | Brief Assessment of Recovery Capital<sup>d</sup> | Recovery capital | 10 | Vilsaint et al., 2017 |

Notes:
- <sup>a</sup> Binary scale.
- <sup>b</sup> 4-point Likert-type scale.
- <sup>c</sup> 5-point Likert-type scale.
- <sup>d</sup> 6-point Likert-type scale.
- <sup>e</sup> 7-point Likert-type scale.

2.2. Materials

The survey was created and administered to participants through the Qualtrics platform. Informed consent was obtained electronically prior to participation. Anonymity was ensured through the assignment of unique identifiers at the time of consent. The participant was required to enter this identification number to complete each daily survey to enable linking daily data to baseline measures while maintaining participant anonymity.
Table 4
Overview of the Daily Measures.

| Variable Prefix | Measure | Study Variable | Total Items | Author |
|-----------------|---------|----------------|-------------|--------|
| SOS_            | Service to Others in Sobriety Scale | Helping behavior | 12          | Pagano et al., 2010 |
| GAC_            | Gratitude Adjectives Checklist | State-level gratitude | 3          | Emmons & McCullough, 2003 |
| SAS_            | Self-Absorption Scale | Private self-absorption | 17         | McKenzie & Hoyle, 2008 |
|                 |                     | Public self-absorption |          |        |
| HSNS_           | Hypersensitive Narcissism Scale | Covert narcissism | 12         | Hendin & Cheek, 1997 |
| PANAS_          | Positive and Negative Affect Schedule | Mood | 10         | Watson et al., 1988 |
| SE_             | Self-Efficacy Scale | Self-efficacy | 10         | Rosenberg, 1965 |

Notes.
a Binary scale.
b 4-point Likert-type scale.
c 5-point Likert-type scale.

Table 5
Sample Demographics.

| Variable                     | N    | Valid% |
|------------------------------|------|--------|
| Age (years)                  |      |        |
| <20                          | 1    | 0.9    |
| 20–29                        | 36   | 32.1   |
| 30–39                        | 42   | 33.9   |
| 40–49                        | 18   | 16.1   |
| 50–59                        | 7    | 6.3    |
| 60–69                        | 7    | 6.3    |
| 70+                          | 1    | 0.9    |
| Gender                       |      |        |
| Male                         | 36   | 31.9   |
| Female                       | 77   | 68.1   |
| Race                         |      |        |
| Alaskan Native/Native American | 1  | 0.9    |
| Asian/Pacific Islander       | 2    | 1.8    |
| Black/African                | 1    | 0.9    |
| Hispanic/Latino/a            | 4    | 3.5    |
| White/Caucasian              | 102  | 90.3   |
| Bi/Multiracial               | 3    | 2.7    |
| Highest Level of Education   |      |        |
| Some High School             | 1    | 0.9    |
| GED/High School Diploma      | 2    | 1.8    |
| Some college                 | 45   | 39.8   |
| College degree               | 38   | 33.6   |
| Master's Degree              | 20   | 17.7   |
| Professional Degree          | 5    | 4.4    |
| M.D./PhD                     | 2    | 1.8    |
| Average Annual Income        |      |        |
| $0 - $24,999                 | 32   | 28.3   |
| $25,000 - $49,999            | 38   | 33.6   |
| $50,000 - $74,999            | 27   | 23.9   |
| $75,000 - $99,999            | 5    | 4.4    |
| $100,000+                    | 11   | 9.7    |

Note. Additional demographic information has been omitted to save space. See full dataset for all available variables.
Table 6
Recovery Related Information.

| Variable                                | n  | Valid% | M   | SD  |
|-----------------------------------------|----|--------|-----|-----|
| **Time in Recovery**                    |    |        | 7.63| 9.17|
| **Primary Addiction**                   |    |        |     |     |
| Alcohol                                 | 72 | 63.7   |     |     |
| Drugs                                   | 41 | 36.3   |     |     |
| **Number of Weekly Meetings Attended**  |    |        | 2.99| 1.82|
| 0                                       | 6  | 5.4    |     |     |
| 1                                       | 17 | 15.1   |     |     |
| 2                                       | 28 | 24.8   |     |     |
| 3                                       | 27 | 23.9   |     |     |
| 4                                       | 13 | 11.5   |     |     |
| 5                                       | 12 | 10.6   |     |     |
| 6                                       | 5  | 4.4    |     |     |
| 7+                                      | 5  | 4.5    |     |     |
| **Working 12-Steps with a Sponsor**     |    |        |     |     |
| Yes                                     | 101| 89.4   |     |     |
| No                                      | 11 | 9.7    |     |     |
| **Sponsoring Others**                   |    |        |     |     |
| Yes                                     | 60 | 53.1   |     |     |
| No                                      | 53 | 46.9   |     |     |

**Number of Sponsees** 1.5 1.71

Note. N = 113; M and SD represent mean and standard deviation, respectively.

2.3. Baseline measures

Short Inventory of Problems – Revised (SIP-R; Kiluk et al., 2013 [1]). A 17-item scale that is designed to assess negative consequences of substance use on a 4-point Likert-type scale.

Experiences in Close Relationships Scale – Short Form (ECR-S; Wei et al., 2007 [2]). A 12-item scale that measures avoidant and anxious subscales of attachment using a 7-point scale.

Narcissistic Personality Scale - 13 (NPI-13; Gentile et al., 2013 [3]). A 13-item scale that uses binary items to measure grandiose narcissism.

Altruistic Personality Scale (APS; Rushton et al., 1981 [4]). A 20-item scale used to measure baseline trait-level lifetime altruistic behavior using a 5-point scale.

Gratitude, Resentment and Appreciation Test (GRAT; Watkins et al., 2003 [5]). A 16-item scale used to measure trait gratitude levels on a 9-point scale.

Ten-Item Personality Inventory (TIPI; Gosling et al., 2003 [6]). A 10-item assessment of the big 5 personality traits: was used to assess big 5 personality traits: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Kessler Non-Specific Psychological Distress Scale (K-6; Kessler et al., 2002 [7]). A 6-item measure of distress experienced over a period of 30 days as indicated by responses on a 5-point scale.

Social Desirability Scale - Short version (SDS; Strahan & Gerbasi, [8]). A scale containing 10 true or false items to measure the participant’s tendency to respond in a socially acceptable manner.

Alcohol-Cod Locus of Control Scale (AGLOC; Murray et al., 2006 [9]). A measure of God/Higher Power control beliefs over alcoholism, calculated using a 6-point Likert response format.

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965 [10]). A 10-item, 4-point scale that measures global self-worth by evaluating both positive and negative feelings about the self.

Brief Assessment of Recovery Capital (BARC-10; Vilsaint et al., 2017 [11]). A 10-item measure designed to quantify internal and external resources available to individuals initiating and sustaining recovery that is measured on a 6-point scale.

2.4. Daily measures

Service to Others in Sobriety Scale (SOS; Pagano et al., 2010 [12]). A 12-item measure of the frequency of prosocial behavior on that day indicated by yes/no responses. Modified for daily use.
Gratitude Adjectives Checklist (GAC; Emmons & McCullough, 2003 [13]). A 3-item measure commonly used to assess participant’s level of daily gratitude as indicated by scores on a 5-point scale.

The Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997 [14]). A measure of covert narcissism reported on a 5-point Likert scale.

Self-Absorption Scale (SAS; McKenzie & Hoyle, 2008 [15]). A 17-item, 5-point measure of how much time was spent thinking about the self.

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988 [16]). A 10-item measure of daily mood as indicated by participant response on a 5-point scale.

3. Procedure

Recruitment of members of Alcoholics Anonymous was conducted online through advertisements on social media sites (i.e., Twitter, Facebook), the use of recovery-related e-mail listservs, and, subsequently, snowball sampling. Participants who agreed to be contacted regarding future studies related to recovery were also contacted via e-mail (i.e., Life in Recovery Study 1 and 2; LaBelle & Edelstein, 2018 [17]). To be eligible for inclusion, respondents had to be at least 18 years of age, an active member of AA (self-defined) with a sponsor and a minimum of 90 days of sobriety. During recruitment, participants were advised they would be compensated for their time with a single payment of up to $20; The total amount of compensation was calculated based on the receipt of $15 for initial survey completion and an additional bonus payment of $5 for the completion of all seven days of daily reporting. Participants received and responded to the baseline survey via their laptop or desktop computer; daily report surveys could be completed on any device but were optimized for completion on a mobile phone for ease in reporting.

To ensure that the optimal sample size had been achieved, daily reporting commenced five days following the initial survey launch and baseline data collection. Over the following seven days, participants were asked to complete a 10-minute survey each evening, which required them to reflect on prosocial behavior, mood, gratitude, selfishness and basic daily health behaviors. To increase the response rate, email and text message reminders containing a survey link were sent to participants each evening at 8 pm in each participant’s designated time zone. Response rates to the daily survey ranged between 72.6% to 92.9% each night (M = 20.1%).

The analyses used in the resultant article was multilevel modeling with daily reports nested within individuals (LaBelle, 2020 [18]). These data may be reused for cross-sectional studies to look at relationships among the study variables, or across days to assess individual differences in behavior.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships which have, or could be perceived to have, influenced the work reported in this article.

CRediT authorship contribution statement

Onawa LaBelle: Conceptualization, Methodology, Investigation, Formal analysis, Writing - review & editing, Funding acquisition. Maurissa Hastings: Writing - original draft, Visualization, Data curation.

Acknowledgments

The authors would like to thank the study participants, the research assistants who assisted with this project, and Rackham Graduate School at the University of Michigan for funding the study.
Ethics Statement

This project was reviewed and cleared by the institutional review board at the first author’s university. Informed consent was obtained from each participant prior to data collection.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.dib.2020.105983.

References

[1] B.D. Kiluk, J.A. Dreifuss, R.D. Weiss, J. Morgenstern, K.M. Carrol, The short inventory of problems–revised (SIP-R): psychometric properties within a large, diverse sample of substance use disorder treatment seekers, Psychol. Addictive Behav. 27 (2013) 307–314, https://doi.org/10.1037/a0028445.

[2] M. Wei, D.W. Russell, B. Mallinckrodt, D.L. Vogel, The experiences in close relationship scale (ECR)-short form: reliability, validity, and factor structure, J. Pers. Assess. 88 (2007) 187–204, https://doi.org/10.1080/00223890701268041.

[3] B. Gentile, J.D. Miller, B.J. Hoffman, D.E. Reidy, A. Zeichner, W.K. Campbell, A test of two brief measures of grandiose narcissism: the narcissistic personality inventory–13 and the narcissistic personality inventory-16, Psychol. Assess. 25 (2013) 1120–1136, https://doi.org/10.1037/a0033192.

[4] J.P. Rushton, R.D. Chrisjohn, G.C. Fekken, The altruistic personality and the self-report altruism scale, Pers Individ Dif 2 (1981) 293–302, https://doi.org/10.1016/0191-8869(81)90084-2.

[5] P.C. Watkins, K. Woodward, T. Stone, R.L. Kolts, Gratitude and happiness: development of a measure of gratitude, and relationships with subjective well-being, Soc. Behav. Personal. 31 (2003) 431–451, https://doi.org/10.2224/sbp.2003.31.5.431.

[6] S.D. Gosling, P.J. Rentfrow, W.B. Swann Jr, A very brief measure of the big-five personality domains, J. Res. Pers. 37 (2003) 504–528, https://doi.org/10.1016/S0092-6566(03)00046-1.

[7] R.C. Kessler, G. Andrews, L.J. Colpe, E. Hiripi, D.K. Mroczek, S.L.T. Normand, A.M. Zaslavsky, Short screening scales to monitor population prevalences and trends in non-specific psychological distress, Psychol. Med. 32 (2002) 959–976, https://doi.org/10.1017/s0033291702006074.

[8] R. Strahan, K.C. Gerbasi, Short, homogenous versions of the Marlowe-Crowne social desirability scale, J. Clin. Psychol. 2 (1972) 293–302, https://doi.org/10.1002/1097-4679(197207)2:3<293::aid-jclp2270020314>3.0.co;2-2.

[9] T.S. Murray, K. Goggin, V.L. Malcarne, Development and validation of the alcohol-related God locus of control scale, Addict. Behav. 31 (2006) 553–558, https://doi.org/10.1016/j.addbeh.2005.12.023.

[10] M. Rosenberg, Rosenberg self-esteem scale (RSE): Acceptance and commitment therapy, Measures Package 6 (1965) 18.

[11] C.L. Vilsaint, J.F. Kelly, B.G. Bergman, T. Groshkova, D. Best, W. White, Development and validation of a brief assessment of recovery capital (BARC-10) for alcohol and drug use disorder, Drug Alcohol Depend. 177 (2017) 71–76, https://doi.org/10.1016/j.drugalcdep.2017.03.022.

[12] M.E. Pagano, A.R. Krentzman, C.C. Onder, J.L. Baryak, J.L. Murphy, W.H. Zywiak, R.L. Stout, Service to others in sobriety (SOS), Alcohol Treat Q. 28 (2010) 111–127, https://doi.org/10.1080%2F07347321003656425.

[13] R.A. Emmons, M.E. McCullough, Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life, J. Pers. Soc. Psychol. 84 (2003) 377–389, https://doi.org/10.1037/0022-3514.84.2.377.

[14] H.M. Hendin, J.M. Cheek, Assessing hypersensitive narcissism: a reexamination of Murray’s Narcissism Scale, J. Res. Pers. 31 (1997) 588–599, https://doi.org/10.1006/jrpe.1997.2204.

[15] K.S. McKenzie, R.H. Hoyle, The self-absorption scale: reliability and validity in non-clinical samples, Pers. Individ. Dif. 45 (2008) 726–731, https://doi.org/10.1016/j.paid.2008.07.020.

[16] D. Watson, L.A. Clark, A. Tellegen, A. Development and validation of brief measures of positive and negative affect: the PANAS scales, J. Pers. Soc. Psychol. 54 (1988) (1988) 1063–1070, https://doi.org/10.1037/0022-3514.54.6.1063.

[17] O. LaBelle, R. Edelstein, Gratitude, insecure attachment, and positive outcomes among 12-step recovery participants, Addict. Res. Theory 26 (2018) 1–10, https://doi.org/10.1080/16066359.2017.133111.

[18] O. LaBelle, Daily associations between prosocial behavior, gratitude, and selfishness in members of Alcoholics Anonymous, Alcohol Treat Q. (2020), https://doi.org/10.1080/07347324.2020.1768992.