Apology ADHD and Relationship Experience Study Protocol

Exploratory cross-sectional online study

Study originator and investigator Bill G. Wolcott

Study setting billgwolcott.com

Protocol version 1.0

Protocol date September 15, 2026

Study phase Exploratory pilot and methods development

Questionnaire version Apology Test instrument 2.0.0

Purpose of this protocol

This document defines the research question, hypotheses, measures, analysis plan, participant protections, and reporting limits for the Apology Test. It is designed for methodological review by psychologists, statisticians, and research ethics reviewers. It does not present the test as a diagnostic instrument or as a validated measure of trauma, abuse, or excessive apologizing.

Current scientific status

The website can support an exploratory observational study, but the existing records were collected before this written protocol. Those records must remain labeled pilot data. A confirmatory phase should begin only after the hypotheses, consent process, eligibility checks, and analysis plan have been externally reviewed and locked.

Protocol summary

Protocol element	Specification
Design	Cross-sectional observational survey using a self-selected online sample
Population	Adults age 18 or older who can read English and complete the online test
Primary exposure	Six item ASRS v1.1 screen positive versus below cutoff
Primary outcome	Number of 11 apology situations rated Often or Very often
Secondary exposure	Self reported history of unpredictable blame in an adult relationship
Primary comparison	Apology breadth in ASRS positive versus below cutoff respondents
Interaction comparison	Whether the association is stronger when ASRS positivity and blame history occur together
Study milestones	Pilot review before 100 included responses; exploratory report at 1,000; precision and replication report at 10,000
Inference limit	Association only; no diagnosis, prevalence estimate, or causal conclusion

Plain language summary

Bill G. Wolcott developed the study to examine whether people who report frequent automatic apologies are more likely to screen positive for adult ADHD traits. The study also asks whether the apology pattern is most pronounced among people who both screen positive and report a history of unpredictable blame. The design separates ADHD screening status from relationship history so that neither explanation is assumed in advance.

The study measures how broadly a respondent apologizes across 11 situations. It does not measure how much the person suffers, and it does not determine why the behavior developed. The ASRS is a screening measure, not a diagnosis. The relationship questions are original indicators and cannot establish that abuse occurred.

Scientific conclusion permitted by the design

If the hypothesized pattern appears, the study may report that ADHD screening status and frequent apologizing were associated in this website sample, and that the association differed by reported blame history. It may not report that ADHD or abuse causes excessive apologizing, that the pattern applies to the general population, or that a participant has ADHD, trauma, or an abusive relationship.

Background and rationale

Apologies can repair relationships after genuine wrongdoing, but people differ in how often they apologize and in what they perceive as requiring an apology. Experimental and diary research has examined apology frequency, perceptions of offenses, and the social consequences of frequent apologizing. That literature does not establish a recognized ADHD specific over apologizing syndrome.

Several experiences associated with ADHD may nevertheless create situations in which a person apologizes repeatedly, including lateness, missed obligations, interruption, and loss of focus. The present study tests that proposed association directly rather than treating it as established fact. The six-item ASRS v1.1 provides a standardized adult ADHD screen, while the original apology items measure the frequency and breadth of apologizing in everyday situations.

Relationship adversity may provide a separate route to automatic apologizing. A person who has learned that another person's mood, withdrawal, or blame predicts conflict may apologize before determining whether they did anything wrong. Existing research has also reported associations between ADHD symptoms and childhood maltreatment or intimate partner violence. These findings support examining ADHD and relationship history together, but they do not establish that either experience produces over apologizing.

Objectives and research questions

Primary objective

Estimate the association between adult ADHD screening status and the breadth of frequent automatic apologizing among adults who complete the Apology Test online.

Secondary objective

Estimate whether reported adult blame history modifies the association between ADHD screening status and apology breadth.

Exploratory objectives

- Describe apology frequency across the 11 original apology situations.
- Describe the joint distribution of ASRS screening status, childhood unpredictability, adult blame history, and the safety flag.
- Examine the original ADHD-shaped apology grouping based on lateness, forgetting, interruption, zoning out, and reflexive apology.
- Describe the original fawn response, rejection sensitivity, sociotropy, and no strong pattern classifications without treating them as clinical diagnoses.
- Evaluate completion, missingness, duplicate response risk, and the stability of estimates as the sample grows.

Research questions

1. Do ASRS positive respondents report frequent apologies in more situations than respondents below the ASRS cutoff?
2. Is the difference in apology breadth larger among respondents who report an adult history of regular misplaced blame?
3. Does childhood unpredictability show a similar or distinct pattern from adult blame history?
4. Are results consistent across alternative definitions of frequent apologizing?

Hypotheses

Identifier	Prespecified hypothesis	Primary quantity
H1	ASRS positive respondents will have a higher mean count of frequent apology situations than below cutoff respondents.	Mean difference in the 0 to 11 apology breadth count
H2	The association between ASRS positivity and apology breadth will be stronger among respondents with adult blame history.	ASRS by blame history interaction
H3	The ASRS positive plus blame history group will have the highest estimated apology breadth of the four joint exposure groups.	Four group marginal means and ordered contrast
H4	ASRS positive respondents will more often meet the dashboard threshold of frequent apologizing in 6 or more situations.	Risk difference and relative risk for the 6 plus threshold

H1 and H2 are the main inferential tests. H3 and H4 are secondary. All analyses involving the original pattern labels, childhood unpredictability, safety flags, daily practice, or individual items are exploratory.

Study design

The study is an observational cross-sectional online survey embedded in a reader-facing self-reflection test. Participants select their own responses. There is no random assignment, clinical interview, medical-record verification, or experimental manipulation. The seven-day practice program follows the test but is not part of the primary cross-sectional analysis.

Study phases

Phase	Purpose	Use of findings
Pre-protocol pilot	Identify implementation and measurement problems in records collected before protocol version 1.0	Exploratory only; not preregistered
Methods pilot	Test consent, eligibility, data quality, and estimate response distributions	Refine the confirmatory protocol before locking it
Exploratory cohort	Accumulate 1,000 eligible included responses under a stable instrument	Estimate associations with confidence intervals
Large sample replication	Reassess the same hypotheses at 10,000 included responses	Evaluate precision, stability, and heterogeneity

The sample milestones are reporting points, not proof thresholds. Statistical significance at a milestone does not convert the observational design into evidence of causation.

Study setting and recruitment

Participants are recruited through the public Apology Test page on billgwolcott.com. Visitors may arrive through articles, search engines, social media, referrals, or direct navigation. Recruitment is therefore nonprobability convenience sampling. No payment is offered. The study should not use language promising diagnosis, treatment, or personal clinical benefit.

Participants

Eligibility criteria

- Age 18 years or older.
- Able to read and respond in English.
- Able to understand the study disclosure and voluntarily choose whether the completed response may be used for research.
- Completes all 21 required questions with valid response values.

Exclusion criteria

- Administrator, developer, quality assurance, or other known test submissions.
- Responses marked as test data by the administrator.
- Incomplete or technically invalid submissions.
- Responses from a participant who does not affirm being at least 18 years old in the confirmatory phase.
- Duplicate or automated submissions when they can be identified using a documented rule that does not require retaining unnecessary personal identifiers.

Current eligibility limitations

The current test states that the ASRS questions are for adults but does not independently verify age. Anonymous submissions also cannot be reliably deduplicated. These limitations must be reported for pilot data. Before a confirmatory phase, the test should add an age affirmation, a clear research choice, and a documented duplicate handling rule.

Measures

Domain	Items	Scoring and interpretation
Apology frequency	11 original items rated Never to Very often	Primary breadth count is the number rated Often or Very often; range 0 to 11. A mean frequency score from 0 to 4 is secondary.
Adult ADHD screening	Six-item WHO Adult ADHD Self-Report Scale v1.1 Screener	Published item-specific thresholds are applied. Four or more threshold items indicate a positive screen. It is not a diagnosis.
ADHD-shaped apologies	Lateness, forgetting, interruption, zoning out, and reflexive apology	Original exploratory mean score. It is not a validated subscale.

Domain	Items	Scoring and interpretation
Adult blame history	One original item about regular blame for things that were not the respondent's	Any response other than No defines blame history for the current four group analysis.
Childhood unpredictability	One original item about whether trouble depended on someone's mood	Mostly the mood or Always the mood defines childhood unpredictability for exploratory analysis.
Safety context	Scope of apologizing and anticipated reaction if apologizing stopped	Current blame or anticipated retaliation activates a safety response. This is not an abuse diagnosis.
Pattern feedback	Original groupings labeled fawn response, rejection sensitivity, sociotropy, or no strong pattern	Feedback categories for reflection. They are not validated diagnostic classifications and are exploratory in research.

Response scale

The 17 frequency items use five ordered response options scored 0 through 4: Never, Rarely, Sometimes, Often, and Very often. The four background and safety items use item-specific categorical response options. All 21 items are required for a valid stored completion.

Terminology

The study uses adult blame history and childhood unpredictability as descriptive variables. It does not classify a participant as abused. A future study that makes abuse a formal exposure should use a validated measure, obtain appropriate ethics review, and revise the consent and safety plan.

Outcomes exposures and analysis groups

Role	Variable	Operational definition
Primary outcome	Apology breadth	Count from 0 to 11 of original apology items answered Often or Very often
Secondary outcome	Mean apology frequency	Mean of the 11 original apology item scores from 0 to 4
Secondary outcome	Broad apologizing threshold	Apology breadth of 6 or more situations
Primary exposure	ASRS screening status	Positive when at least four of six items meet the published item-specific threshold
Effect modifier	Adult blame history	Once, More than once, or I am in one now versus No
Exploratory exposure	Childhood unpredictability	Mostly the mood or Always the mood versus Predictable or Mostly predictable

Four group comparison

Group	ASRS screen	Adult blame history	Role in H3
A	Positive	Present	Hypothesized highest apology breadth
B	Positive	Absent	ADHD screening without adult blame history
C	Below cutoff	Present	Adult blame history without a positive screen
D	Below cutoff	Absent	Reference group

Variables not currently measured

The present test does not collect age band, sex or gender, race or ethnicity, country, formal ADHD diagnosis, medication status, anxiety, depression, posttraumatic symptoms, or frequency of actual interpersonal transgressions. These factors could affect both apologizing and ASRS responses. The primary analysis is therefore unadjusted, and residual confounding must be treated as a central limitation. Adding covariates should occur only through a documented protocol amendment that balances scientific value against privacy and completion burden.

Data collection procedures

1. The visitor reads a plain language study disclosure before beginning the research version of the test.
2. The visitor confirms age eligibility and chooses whether the completed response may enter the study dataset. Declining research use should not prevent access to the self-reflection result.

3. The visitor answers the 21 items in a fixed order. The server validates that every item is present and within its allowed range.
4. The server calculates the apology, ASRS, background, safety, and feedback variables using version-controlled scoring code.
5. Administrator and known quality assurance submissions are automatically labeled test data and excluded from study summaries and exports.
6. The participant receives the personal result and may optionally enroll in the seven morning practice program.

Instrument changes

Changes to question wording, order, response options, scoring thresholds, exposure definitions, or the primary outcome create a new questionnaire version. Results from different versions must be reported separately until measurement comparability is demonstrated. Administrative and visual changes that do not alter participant responses or scoring may retain the questionnaire version.

Participant safety and welfare

The study presents minimal physical risk but can create emotional discomfort because it asks about fear, unpredictable trouble, retaliation, and misplaced blame. It can also create privacy risk if identifiable account or contact information is exposed. The study is not therapy, diagnosis, crisis counseling, or a substitute for professional care.

Risk	Safeguard
Emotional discomfort	State the subject matter before participation; allow exit at any time; avoid requiring an explanation for withdrawal.
Current relationship danger	Display safety first guidance when retaliation or current blame is reported; do not instruct the participant to reduce apologizing around an unsafe person.
Need for rapid exit	Keep the Quick exit control visible and explain that it cannot erase browser history.
Clinical misunderstanding	Repeat that the ASRS is a screen and that original apology and relationship items are not diagnoses.
Privacy breach	Minimize identifiers, restrict administrator access, exclude direct identifiers from research exports, and maintain retention limits.
Undue influence	Offer no diagnosis, payment, or access advantage for joining the study. Make research participation voluntary.

Safety resources

When a response indicates possible retaliation or current regular blame, the result should prioritize safety and provide the National Domestic Violence Hotline information used on the site. Emergency language should direct a person in immediate danger to local emergency services. Resources must be reviewed periodically for accuracy.

Potential benefits

Participants may gain a structured description of their apology habits and a practical reflection exercise. No clinical benefit is promised. The broader potential benefit is improved understanding of whether ADHD screening responses and relationship experience are associated with automatic apologizing.

Data management and privacy

The personal result system and the research dataset should be treated as related but distinct functions. A stored website result may be identifiable or pseudonymous even when the research export is de-identified. The term anonymous should be reserved for data that cannot reasonably be linked back to a person by the investigator.

Data element	Current handling	Research rule
WordPress user ID	Stored for signed-in results until the user deletes the result	Exclude from research exports and analytical files
Name and email	Optional for the seven morning program and cleared after 40 days	Never export with study responses
Private result token	Used to return a signed-out visitor to a result	Never export; delete with the raw signed-out record after 180 days
Raw 21-item response	Retained for signed-out results for 180 days; signed-in results remain until deletion	Restrict access and use only included study records
Derived study variables	Calculated from the response and instrument version	Export under a random study ID without account or contact identifiers
Long term totals	Fixed aggregate counts retained after eligible old anonymous records are removed	Explain that individual withdrawal is no longer possible after irreversible aggregation

Withdrawal

A participant should be able to delete a stored result while the individual record remains available. Once a signed-out record has been deleted and incorporated only into nonidentifiable aggregate totals, the investigator can no longer identify or remove that contribution. The study disclosure must state this limit before participation.

Access and audit

Only authorized administrators should access identifiable or pseudonymous result records. Known administrator tests are excluded automatically. Manual inclusion, exclusion, and deletion actions should use authenticated controls and should be logged when the study enters a confirmatory phase. Analytical exports must omit names, emails, account IDs, private result tokens, and network identifiers.

Statistical analysis plan

Analysis populations

- Pilot population: all technically valid included records collected before the confirmatory protocol lock.
- Primary analysis population: all eligible, consented, complete responses collected under the locked questionnaire and protocol version.
- Safety population: all completed responses, including those excluded from research summaries when needed to operate participant safety messaging. Safety operations are not an inferential analysis.

Descriptive analysis

Report the number of included and excluded submissions, collection dates, instrument versions, completion failures, and known test records. For each exposure group, report the apology breadth distribution, mean, standard deviation, median, interquartile range, and the proportion meeting the 6 or more threshold. Report ASRS positivity, adult blame history, childhood unpredictability, and safety flags as counts and percentages with 95 percent confidence intervals.

Primary analysis

Estimate H1 with a regression model in which apology breadth from 0 to 11 is the outcome and ASRS screening status is the predictor. Report the unadjusted mean difference with an HC3 heteroskedasticity-robust 95 percent confidence interval and two-sided p value. The estimand is the average difference in the number of situations rated Often or Very often between screening groups in the eligible website sample.

Interaction analysis

Estimate H2 with a model containing ASRS status, adult blame history, and their interaction. Report the interaction on the additive scale, the four model-estimated group means, pairwise contrasts relevant to H3, and 95 percent confidence intervals. The interaction term tests whether the ASRS association differs by adult blame history; it does not establish that the two exposures jointly cause apologizing.

Binary threshold analysis

For H4, estimate the proportion with apology breadth of 6 or more in each ASRS group. Report the risk difference, relative risk, and 95 percent confidence intervals. The dashboard's threshold sensitivity table should repeat this calculation at every cutoff from 1 through 11 so the conclusion does not depend on one selected threshold. The 6 or more result remains the prespecified secondary endpoint.

Sensitivity analyses

- Repeat H1 using the mean 0 to 4 apology frequency score so that all response categories contribute.
- Repeat H1 and H2 with ordinal regression for the 0 to 11 apology breadth count.
- Examine adult blame history as an ordered exposure rather than a binary variable.
- Repeat the interaction model using childhood unpredictability as the relationship history variable.
- Report results separately by questionnaire version if any item or scoring change occurs.
- Repeat estimates after excluding records with current blame or anticipated retaliation to determine whether the safety subgroup dominates the association.

Missing data

The current server accepts a completion only when all 21 responses are present and valid. Primary analyses therefore use complete records. The report must state how many attempts failed validation or were abandoned if those counts are available. No single value imputation is planned.

Multiplicity and exploratory analyses

H1 and H2 are the two main tests. H3 and H4 are secondary. All other comparisons are exploratory and should be reported with confidence intervals and clear labels rather than presented as independent confirmations. The study should not select a favorable cutoff, subgroup, or outcome after reviewing the results.

Sample size and reporting milestones

The project uses 1,000 and 10,000 included responses as planned reporting milestones. Before a confirmatory sample is opened, a statistician should define the smallest meaningful difference in apology breadth and calculate the required sample size for H1 and H2 using pilot estimates of group prevalence and outcome variance. The resulting target and stopping rule must be added in a dated protocol amendment before confirmatory data are examined.

Bias and limitations

- Self selection bias: people who visit an article about excessive apologizing are unlikely to represent the general population.
- Cross sectional timing: all main variables are measured at one time, so temporal order and causation cannot be determined.
- Common-method bias: apology, ADHD, and relationship variables are all self-reported in the same session.
- Screening misclassification: the ASRS does not confirm a clinical ADHD diagnosis and symptoms may have other explanations.
- Unvalidated outcomes: the 11 apology items, ADHD-shaped grouping, relationship items, and pattern classifications require psychometric evaluation.
- Exposure misclassification: adult blame history and childhood unpredictability are not validated measures of abuse or trauma.
- Unmeasured confounding: demographic, clinical, cultural, and interpersonal factors are not currently collected.
- Duplicate submissions: anonymous repeat responses cannot always be recognized, so the unit may be a test submission rather than a unique person.
- Survivorship and safety effects: people in dangerous situations may answer differently, leave the test, or avoid participation.
- Protocol timing: records collected before version 1.0 cannot be described as prospectively preregistered data.

Psychometric development

A larger study should evaluate the original apology items before treating them as a scale. Recommended work includes item distributions, internal consistency, dimensional structure, test-retest reliability, convergent and discriminant validity, and measurement invariance across relevant groups. Pattern labels should remain reader feedback until their scoring demonstrates acceptable reliability and validity.

Ethics and governance

The project is designed to test hypotheses and contribute to generalizable knowledge. That purpose makes research ethics review relevant even if a particular independent project is not covered by the federal Common Rule. Regulatory status should be determined by a qualified institutional review board or independent ethics review service before the project is promoted as formal human subjects research. The investigator should follow the Belmont principles of respect for persons, beneficence, and justice regardless of regulatory coverage.

Required consent elements

- State that participation involves research and identify Bill G. Wolcott as the investigator.
- Explain the purpose, 21-question procedure, estimated duration, and exploratory status.
- Describe foreseeable emotional and privacy risks and the absence of guaranteed clinical benefit.
- Explain what information is stored, how it is de-identified for analysis, retention periods, and the limits on withdrawal after aggregation.
- State that participation is voluntary and that declining research use does not prevent access to the public educational material or personal test result.
- Provide a working contact method for study questions and a separate contact or process for participant rights when available.

Protocol changes

Every material change must receive a new protocol version and date. The amendment record should state what changed, why it changed, whether the questionnaire version changed, and which responses were collected under each version. Hypotheses and primary outcomes may not be rewritten after results are known and then described as prespecified.

Reporting and dissemination

Reports should follow the STROBE recommendations for cross-sectional observational studies. Every public report should describe recruitment, eligibility, included and excluded responses, instrument versions, missing data, statistical methods, effect estimates with confidence intervals, and limitations. Null and mixed findings should be reported alongside positive findings.

The language of publication should remain proportionate to the design. Appropriate wording is associated with, differed between, or was more common in this sample. Inappropriate wording includes caused, proves, ADHD people apologize excessively, or abuse explains the result.

Operational requirements before confirmatory enrollment

Priority	Required action	Reason
1	Obtain an external determination of ethics and regulatory requirements	The project is designed to test hypotheses using participant responses

Priority	Required action	Reason
2	Add a plain language research disclosure and an explicit study participation choice	Current website language describes storage but is not a complete research consent process
3	Add an age 18 or older affirmation	The ASRS and protocol are limited to adults
4	Allow the educational result without requiring research participation	Participation should be voluntary
5	Lock the questionnaire wording, scoring, primary outcome, hypotheses, and analysis code	Prevents outcome switching after results are seen
6	Document exclusion, duplicate handling, administrator actions, and protocol amendments	Creates an auditable study record
7	Obtain statistical review and calculate the confirmatory sample size	The 1,000 and 10,000 milestones do not replace a power analysis
8	Conduct psychometric evaluation of the original apology measure	The study depends on an original unvalidated outcome

Public study description

The test page should contain a concise public summary of this protocol. It should identify the investigator, state H1 and H2 in plain language, explain the four-group comparison, describe the ASRS as a screen, avoid classifying respondents as abused, and link to the complete protocol and consent information. The public summary should not attempt to reproduce the full methods document.

Study record

Version	Date	Status	Description
1.0	September 15 2026	Initial written protocol	Defines the existing exploratory study, separates pilot from future confirmatory data, and lists safeguards and design changes required before confirmatory enrollment.

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Appendix A Measure map

Construct	Item keys	Count	Research status
Apology breadth	fault, late, jolt, gap, forgot, reflex, space, interrupt, trouble, zoned, second	11	Original primary outcome
ASRS screen	asrs1 through asrs6	6	Validated screening instrument with published scoring
Adult blame history	blamed	1	Original exposure indicator
Childhood unpredictability	house	1	Original exploratory exposure
Apology scope	where	1	Original safety and context item
Anticipated retaliation	stopped	1	Original safety item
ADHD-shaped apology grouping	late, forgot, interrupt, zoned, reflex	5	Original exploratory composite
Fawn response feedback	jolt, trouble, reflex	3	Original exploratory feedback grouping
Rejection sensitivity feedback	gap, second, reflex	3	Original exploratory feedback grouping
Sociotropy feedback	fault, space, reflex	3	Original exploratory feedback grouping

Appendix B Minimum results tables

1. Participant flow showing starts, completions, invalid submissions, administrator tests, exclusions, and included responses.
2. Descriptive statistics for the full sample and each of the four ASRS by blame history groups.
3. Primary H1 regression estimate with effect size, 95 percent confidence interval, and p value.
4. H2 interaction estimate and model-estimated means for all four groups.
5. H4 risk difference and relative risk for 6 or more apology situations.
6. Threshold sensitivity results for cutoffs 1 through 11.
7. Sensitivity analyses, instrument version checks, and missing or duplicate response assessment.

Appendix C Interpretation rules

Finding	Permitted interpretation	Interpretation not supported
ASRS positive group has higher apology breadth	ADHD screening status was associated with broader frequent apologizing in this website sample	ADHD causes over apologizing
Positive interaction with blame history	The ASRS association was larger among respondents reporting adult blame history	Abuse and ADHD combine to cause apologizing
No detectable difference	The study did not detect the hypothesized association at the observed precision	ADHD has no relationship to apologizing in any population
Pattern changes across cutoffs	The result is sensitive to how frequent apologizing is defined	The most favorable cutoff is the correct one