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The Effect of Noncontingent Monetary Incentives in Recruitment Letters on Research Enrollment of Alzheimer's Disease and Related Dementia Caregiving Dyads: A Study Within a Trial (SWAT) Randomized Controlled Trial

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Abstract

BACKGROUND

Recruitment of persons living with Alzheimer's disease and related dementias (ADRD) and their family caregivers remains challenging. Although noncontingent monetary incentives are frequently used to increase research participation, little experimental evidence supports their effectiveness for recruiting ADRD caregiving dyads. We evaluated whether noncontingent monetary incentives included in mailed recruitment letters increased study response and enrollment.

METHODS

This Study Within A Trial (SWAT) randomized controlled trial identified 300 potential participants through the clinical data warehouse of a US academic health system using documented dementia diagnoses and recent healthcare utilization. Participants were randomized to receive a recruitment letter with no incentive (n = 103), a $5 noncontingent gift card (n = 93), or a $25 noncontingent gift card (n = 104). Individuals who did not directly respond received follow-up telephone outreach. Outcomes included response to the recruitment letter, eligibility, and study enrollment.

RESULTS

Twenty-two participants (7.3%) directly responded to the recruitment letter, and 31 (10.3%) ultimately enrolled. Response rates did not differ significantly across incentive groups (χ^2=1.73, p=.420). Compared with no incentive, neither the $5 incentive (OR = 1.53; 95% CI, 0.47–5.35; p=.485) nor the $25 incentive (OR = 2.06; 95% CI, 0.70–6.81; p=.204) was significantly associated with response. Age and gender were also not associated with response. Follow-up telephone outreach resulted in additional enrollments but required substantial personnel resources.

CONCLUSION

In this trial, $5 and $25 noncontingent monetary incentives included in mailed recruitment letters did not produce a detectable improvement in response among ADRD caregiving dyads. The low response and enrollment rates, coupled with the personnel resources required for follow-up outreach, underscore the practical challenges of recruiting caregiving dyads. Experimental evaluation of scalable, caregiver-centered, and theory-driven recruitment strategies is needed to strengthen the evidence base for efficient ADRD research recruitment.

INTRODUCTION

Family caregivers are central to ADRD research because they are both key informants and active participants in the research process. As cognitive and functional impairment progresses in the family member with dementia, caregivers provide essential information about symptoms, daily functioning, behavioral changes, care needs, safety concerns, and treatment effects that may not be fully captured through patient self-report or clinical assessment alone. Caregivers also shape whether research participation is feasible, acceptable, and sustained, particularly when study procedures require transportation, scheduling support, technology use, monitoring, or proxy reporting. In many ADRD studies, and especially in Alzheimer's disease clinical trials, caregivers or other study partners are not merely helpful supports but required participants who provide collateral information and assist with protocol adherence. Consequently, the advancement of ADRD science depends not only on enrolling persons living with dementia, but also on effectively engaging the family caregivers who make participation possible [1].

However, recruitment of caregiving dyads into ADRD research remains persistently challenging. Barriers exist at multiple levels, including patient and caregiver burden, limited awareness of research opportunities, logistical constraints, and mistrust or uncertainty about research participation [2]. Recent systematic reviews have concluded that recruitment of persons living with dementia and their caregivers is influenced by participant characteristics, study burden, communication strategies, and the involvement of caregivers and clinicians in enrollment decisions [1]. Caregivers often face competing demands on their time, emotional strain, and concerns about the burden of study participation, all of which can reduce willingness to engage in research [1]. As a result, inadequate recruitment is a leading cause of delays, increased costs, and even failure of ADRD studies [2, 3]. These challenges underscore the need for efficient, scalable, and evidence-based recruitment strategies.

Existing literature suggests that recruitment strategies in ADRD research are heterogeneous and often rely on multi-modal approaches, including direct mail, community outreach, clinician referrals, and registry-based identification [4]. Among these, direct mailings have shown promise as a relatively low-cost and scalable method for reaching caregiving dyads, yielding marginally higher enrollment rates among those who respond to the ad at substantially lower cost per participant compared to other outreach methods (though notably, with a 5.5% overall response rate) [5]. However, the overall evidence based guiding recruitment practices remain limited, with few studies prospectively evaluating the effectiveness of specific strategies or isolating the impact of individual components [4, 6].

One strategy to enhance recruitment is the use of noncontingent monetary incentives. Grounded in principles of social exchange theory [7], prepaid incentives may increase participation by fostering a sense of reciprocity and lowering perceived costs of engagement. Prior research in survey methodology and clinical recruitment suggests that nonconditional monetary incentives can improve response rates, though success may vary by population, incentive amount, and study context [8–10]. Within ADRD research, financial incentives have been identified as a potential facilitator of participation [10], however, empirical evidence regarding their effectiveness for recruiting caregiving dyads remain limited.

Given these gaps, there is a need for rigorous, experimental evaluation of recruitment strategies within real-world research contexts to improve enrollment of ADRD caregiving dyads into research. Studies Within A Trial (SWAT) designs have been proposed as a methodological approach to systematically test recruitment interventions embedded within ongoing studies [11]. Such designs allow researchers to generate high-quality evidence on recruitment methods without requiring separate trials.

The present study addresses this need by evaluating the effectiveness of noncontingent monetary incentives included in recruitment letters for ADRD caregiving dyads through a SWAT. Specifically, we conducted a randomized controlled trial to compare recruitment outcomes among individuals receiving letters with no incentive, a $5 gift card, or a $25 gift card within an ongoing caregiving research program. We hypothesized that noncontingent incentives would increase response rates and study enrollment over no incentive. By isolating the effect of incentive magnitude within a standardized recruitment approach, this study aims to provide empirical evidence to inform efficient, cost-conscious recruitment strategies for ADRD research with caregiving dyads.

METHODS

Study Design and Population

This study was a randomized controlled trial embedded within ongoing research recruiting dyads of family caregivers and persons living with ADRD. Our research team was actively recruiting ADRD dyads for two different observational studies, both focused on about behavioral symptoms of dementia with similar eligibility criteria. For both studies all study activities could be completed at home. Potential participants were initially identified using information available in the clinical data warehouse, including a documented ICD diagnosis of dementia and health system utilization within the prior year. Available EHR information was used to identify individuals who appeared to meet study eligibility criteria including absence of active hospice orders, English proficiency, and access to required technology. Co-residence with a primary caregiver was also an eligibility criteria. Eligibility was subsequently confirmed through direct contact with participants or caregivers.

Randomization and Intervention

A total of 300 potential participants were randomly assigned in a 1:1:1 ratio to one of three recruitment arms using REDCap randomization procedures. The experimental manipulation was limited to the presence and amount of a noncontingent monetary incentive included with the mailed recruitment letter. Each group received an otherwise identical recruitment letter containing (1) no gift card, (2) a $5 gift card, or (3) a $25 gift card. The letters were addressed to the “SURNAME FAMILY” to reflect the dyadic nature of the study, comply with IRB regulations and to engage family caregivers.

The content and delivery of the recruitment letter were intentionally standardized across groups so that incentive condition was the only experimentally manipulated component of the initial recruitment

approach. Letters provided general information indicating that the research team was conducting studies centered around ADRD family caregiving and that the goal was to better support caregiving families. The letters also noted that compensation would be provided for participation, that all study activities could be completed at home and included multiple methods for contacting the study team (e.g., phone, email). Detailed study-specific information was minimized to reduce potential confounding effects of study appeal.

Follow-Up Procedures

Two weeks after the initial mailing, study staff conducted follow-up telephone calls to potential participants to assess interest, answer questions, and determine eligibility among those reached. Study staff made up to three attempts to reach the potential participants via phone. Follow-up procedures were applied consistently across randomized conditions and were not part of the experimental manipulation.

Sample Size and Power

A priori power analysis was conducted to determine the sample size required to detect medium to large effect sizes at 80% power ($\alpha = .05$). For the chi-square test comparing response rates across three gift card conditions, a sample of N = 300 provided adequate power (≥ 80%) to detect Cramer's $V \geq 0.25$, corresponding to a medium-to-large effect. For the logistic regression model including gift card condition, gender, and age as predictors, N = 300 provided adequate power to detect Cohen's $f^2 \geq 0.15$, also reflecting a medium effect size (Fig. 1).

Outcomes and Measures

Recruitment outcomes were tracked at multiple stages of the recruitment process for each study arm. These included: (1) the number of individuals who initiated contact with the study team following receipt of the letter, (2) the number successfully reached and engaged during follow-up calls, (3) the number determined to be eligible and interested, and (4) the number ultimately enrolled. Recruitment rates were compared across the three incentive groups to assess the effectiveness of monetary incentives in enhancing participant engagement and enrollment. Gender and age were also examined as potential covariates.

RESULTS

Figure 2 illustrates participant flow through each study condition. A total of 300 recruitment letters were mailed, including 103 in the no-incentive condition, 93 in the $5 incentive condition, and 104 in the $25 incentive condition. Across all conditions, 22 participants (7.3%) directly contacted the study team following receipt of the recruitment letter. Among the 22 participants who directly contacted the study team, 11 were eligible and interested, with 8 ultimately enrolling.

Follow-up phone calls were attempted for the remaining participants. Contact was successfully established with 169 participants, with 34 participants interested and eligible. Twenty-three who were reached through follow-up phone calls subsequently enrolled. Contact could not be established with the remaining 109.

Overall, 31 participants enrolled across all study conditions, corresponding to an overall enrollment rate of 10.3%. Enrollment totals were similar across conditions, with 9 participants enrolled in the no-incentive condition, 11 in the $5 incentive condition, and 11 in the $25 incentive condition. Participant attrition occurred at multiple stages of the recruitment process: only 22 of 300 potential participants directly responded to the mailing, 169 additional participants were successfully reached through follow-up telephone outreach, and 31 participants ultimately enrolled. Of the 31 enrolled dyads, 8 enrolled following direct response to the mailing and 23 enrolled following telephone outreach.

Participant characteristics by response status are presented in Table 1. The analytic sample included 300 participants, of whom 22 responded to the recruitment letter and 278 did not. The mean age of the sample was 81.2 years (SD = 7.5). Most participants were female (59.7%), non-Hispanic (87.7%), and White (49.3%). Among respondents, 45.5% were assigned to the $25 gift card condition, 31.8% to the $5 gift card condition, and 22.7% to the no-incentive condition. Respondents and nonrespondents appeared generally similar with respect to age, gender, race, and ethnicity.

Table 1
Participant Characteristics by Response Status

Characteristic	Overall	Responded: Yes	Responded: No
Gift card arm, n (%)	300 (100.0)	22 (100.0)	278 (100.0)
No gift card	103 (34.3)	5 (22.7)	98 (35.3)
$5 gift card	93 (31.0)	7 (31.8)	86 (30.9)
$25 gift card	104 (34.7)	10 (45.5)	94 (33.8)
Missing	0 (0.0)	0 (0.0)	0 (0.0)
Gender, n (%)			
Male	120 (40.0)	10 (45.5)	110 (39.6)
Female	179 (59.7)	12 (54.5)	167 (60.1)
Other	1 (0.3)	0 (0.0)	1 (0.4)
Age, M (SD)	81.22 (7.52)	80.55 (7.10)	81.27 (7.57)
Race, n (%)			
White	148 (49.3)	10 (45.5)	138 (49.6)
Black or African American	80 (26.7)	8 (36.4)	72 (25.9)
Asian	14 (4.7)	0 (0.0)	14 (5.0)
Native Hawaiian or Pacific Islander	1 (0.3)	0 (0.0)	1 (0.4)
American Indian or Alaska Native	1 (0.3)	0 (0.0)	1 (0.4)
Other race	58 (19.3)	4 (18.2)	54 (19.4)
Ethnicity, n (%)			
Not Hispanic	263 (87.7)	20 (90.9)	243 (87.4)
Mexican, Mexican American, or Chicano/a	2 (0.7)	1 (4.5)	1 (0.4)
Another Hispanic, Latino/a, or Spanish origin	19 (6.3)	1 (4.5)	18 (6.5)
Missing / not selected	16 (5.3)	0 (0.0)	16 (5.8)

Note. Percentages in the Overall column use N = 300 as the denominator. Percentages in the Responded: Yes column use n = 22 as the denominator. Percentages in the Responded: No column use n = 278 as the denominator. Race was collected from EHR; race categories are not strictly mutually exclusive and may not sum to 100%. Ethnicity was also collected from EHR; the Missing / not selected row reflects participants with none of the displayed ethnicity boxes selected. Age was calculated using 2025 minus the birth year.

Bivariate associations between study response and the primary predictor variables are presented in Table 2. Response status was not significantly associated with gift card condition, $\chi^2(2) = 1.73$, $p = .420$, Cramer's V = 0.076. Similarly, response status was not associated with gender, $\chi^2(1) = 0.28$, $p = .597$, Cramer's V = 0.031. Effect sizes for both associations were small.

Table 2
Bivariate Associations With Response

Pair	X2	df	Cramer's V	p	Analysis n
Gift card arm vs response	1.734	2	0.076	.420	300
Gender vs response	0.280	1	0.031	.597	299

Note. The test denominator was n = 300. For gender, the chi-square test included only Male and Female categories; the single participant coded as Other was excluded, yielding n = 299. The gender row reports the uncorrected Pearson chi-square so that X2, p, and Cramer's V are internally consistent. The Yates-corrected gender test was X2(1) = 0.092, p = .762, but that corrected statistic is not paired with the displayed Cramer's V.

Results from the multivariable logistic regression model are presented in Table 3. Compared with participants receiving no incentive, those assigned to the $5 gift card condition had 1.53 times higher odds of responding (95% CI, 0.47–5.35; p = .485), while those assigned to the $25 gift card condition had 2.06 times higher odds of responding (95% CI, 0.70–6.81; p = .204). Neither gender (OR = 1.23, 95% CI, 0.50–2.97; p = .639) nor age (OR = 0.99, 95% CI, 0.93–1.05; p = .678) was significantly associated with response. The model explained little variation in recruitment response (McFadden pseudo-R^2 = 1.36%), suggesting that gift card amount, age, and gender were poor predictors of study response in this sample.

Table 3
Logistic Regression Predicting Response

Predictor	Odds ratio	95% CI	p
$5 gift card vs no gift card	1.53	0.47–5.35	.485
$25 gift card vs no gift card	2.06	0.70–6.81	.204
Male vs female	1.23	0.50–2.97	.639
Age	0.99	0.93–1.05	.678

Note. The logistic regression model used n = 299 complete cases from the analytic sample of N = 300. The outcome was response coded 1 = responded and 0 = did not respond. Reference groups were no gift card and female; therefore, the gender row is reported as Male vs female. Confidence intervals are profile-likelihood 95% confidence intervals from confint(fit). McFadden pseudo-R2 = 1.36%.

DISCUSSION

This randomized controlled trial evaluated whether including monetary incentives in mailed recruitment letters improves engagement and enrollment among dyads of family caregivers and persons living with Alzheimer's disease and related dementias (ADRD). Contrary to expectations based on survey methodology literature, the inclusion of $5 and $25 noncontingent gift cards in mailed recruitment letters did not produce a detectable improvement in recruitment outcomes. Importantly, this trial tested incentive presence and magnitude within an otherwise standardized mailed recruitment approach; it did not independently test other features of the recruitment package, such as message framing, perceived legitimacy, study appeal, or mode of contact. The participant flow also demonstrates substantial attrition across the recruitment process, with low direct response to the mailing and most eventual enrollments occurring only after follow-up telephone outreach. These process outcomes were not experimentally manipulated but provide important context for interpreting the between-group findings. These findings suggest that recruitment interventions that are effective in general survey or ADRD prevention populations do not necessarily translate to ADRD caregiving contexts, where caregiving burden, competing responsibilities, and concerns about research participation may outweigh the perceived value of modest financial incentives.

Our results indicate that the $5 and $25 noncontingent incentives tested within this mailed recruitment approach did not produce a detectable improvement in recruitment among ADRD caregiving dyads. Although prepaid incentives are theorized to increase participation through reciprocity and have demonstrated effectiveness in other contexts [9, 10], the lack of significant differences across study arms suggests that small financial incentives may not overcome the more substantial barriers to participation faced by this population. Caregiving responsibilities, time constraints, and perceived burden associated with research participation may outweigh the perceived benefit of modest incentives. During follow-up calls, some potential participants reported that they initially perceived the recruitment letter and gift card as potentially fraudulent, despite the use of health system-branded letterhead, study URLs, and information for contacting the IRB. These comments were not collected systematically and therefore cannot establish perceived legitimacy as a determinant of response, but they identify a potential mechanism warranting further investigation. While there was a non-significant trend toward higher response in the $25 group, the wide confidence intervals suggest that any potential effect is small and uncertain. Together, these findings contribute to the limited experimental evidence on ADRD caregiving dyad recruitment but do not exclude the possibility that different incentive amounts, formats, or recruitment contexts could influence participation.

Our findings reinforce the central role of family caregivers as gatekeepers in ADRD research participation, a phenomenon consistently identified in systematic reviews of dementia recruitment [2, 4]. Although recruitment materials were addressed broadly to families, the decision to engage ultimately rests with caregivers, who must balance research participation against competing caregiving demands. This dynamic introduces a critical layer of decision-making that is not directly influenced by participant-level noncontingent incentives alone. Caregivers may prioritize minimizing disruption, maintaining routine, and protecting the well-being of the person living with dementia over perceived reciprocity. As a result, noncontingent incentives that are not explicitly aligned with caregiver needs or motivations may

have limited impact. These findings reinforce the importance of designing recruitment strategies that are explicitly caregiver-centered and address how caregivers evaluate the perceived benefits, burdens, and value of participation. Understanding caregiver decision-making may therefore represent a critical target for future recruitment interventions.

Our findings raise important considerations regarding the use of mailed letters as a recruitment strategy. Mailed outreach offers several advantages, including scalability, relatively low cost per contact, and the ability to maintain patient privacy by avoiding unsolicited direct contact. These features make it an attractive first-line approach, particularly when working with large clinical populations identified through administrative data. However, it also is passive and relies on the recipients to initiate contact, which may be unrealistic for busy family caregiving managing competing demands. Prior work has demonstrated that direct mail can be both productive and cost-efficient in dementia research as compared to other available methods [5]. Our overall response rate was slightly higher than previously reported for direct mailings (7.3% vs 5.5%) but eligibility and enrollment were lower (31% vs 85%). As a result, despite the scalability of direct mail, our findings suggest that recruiting 250 dyads for a hypothetical trial would require mailing at least 9,250 recruitment letters. Such volumes may be feasible for large health systems but could be unrealistic for single-site studies or researchers working in smaller clinical settings.

Our findings also highlight an important limitation of recruitment approaches that rely on clinical data warehouses and electronic health records (EHRs). Although our sampling strategy prioritized patients seen recently in clinic, a substantial number of recipients were ultimately found to be ineligible because important changes in circumstance were not reflected in the clinical record. Some families informed us that the person with dementia had died, others reported that the caregiver did not speak English despite the EHR indicating English proficiency, and some lacked reliable internet or smartphone access despite having an active patient portal account. These findings suggest that administrative and clinical data may overestimate the pool of eligible participants and underscore the need to account for EHR misclassification when planning recruitment targets and timelines.

Follow-up telephone outreach was operationally important to overall recruitment: 23 of the 31 enrolled dyads entered the studies following telephone outreach rather than direct response to the mailed letter. Because telephone follow-up was applied to nonresponders across all conditions rather than experimentally assigned, these data cannot establish that telephone outreach caused the additional enrollments. However, they demonstrate that most enrollment in this study required personnel-intensive follow-up beyond the initial mailing. Importantly, such approaches require substantial investment of staff time and resources as compared to direct mailings. Recruitment challenges are often discussed qualitatively, but our findings also illustrate the substantial resources required to recruit ADRD caregiving dyads. This RCT was implemented over three months and cost approximately $25,575 in staff time, or $825 per enrolled dyad across all study conditions, for an enrollment rate of approximately 10 dyads per month. For a hypothetical trial requiring 250 dyads, that would equate to roughly $200,000 in study personnel costs, or approximately one FTE dedicated exclusively to recruitment for three years. Such

costs may be difficult to absorb within current funding mechanisms and may help explain why many ADRD studies struggle to achieve enrollment targets.

More broadly, the persistently low response rates observed across all study arms underscore the ongoing challenges of recruiting ADRD caregiving dyads into research. Our findings suggest that ADRD recruitment research may benefit from a stronger emphasis on theory-driven intervention development. Community outreach, engagement, and advisory board input remain important components of recruitment efforts and may be particularly valuable for building trust and ensuring cultural relevance. However, there remains a need for more mechanistically informed recruitment interventions that explicitly target the behavioral processes underlying participation decisions. For example, choice architecture approaches could test whether simplifying response options, reducing the number of steps required to express interest, or creating default opportunities for follow-up increases participation. Similarly, theories such as the Health Belief Model, Social Exchange Theory, or behavioral economic concepts including salience and loss aversion could generate testable hypotheses regarding how caregivers weigh the perceived benefits, burdens, and value of research participation. Rather than relying primarily on consensus-based recruitment recommendations, future ADRD recruitment research would benefit from experimental studies that directly test these mechanisms and identify which approaches improve enrollment among caregiving dyads.

This study has limitations. It is also possible that larger incentives than those tested in the present study may influence participation decisions. However, the small number of direct responders and wide confidence intervals limit the precision with which the magnitude of any incentive effect can be estimated. The recruitment letters were intentionally designed with neutral, non-specific messaging to isolate the effect of monetary incentives. While this approach strengthens internal validity, it may have reduced the overall appeal and clarity of the invitation, contributing to low engagement across all groups. However, a recent meta-analysis found that user-designed “optimized” detailed study information sheets do not increase study recruitment as compared to researcher created study information sheets [12].

Despite these limitations, this study provides important experimental evidence on recruitment strategies in ADRD caregiving research, an area in which rigorous evaluations remain limited. The findings indicate that the $5 and $25 noncontingent incentives tested in this study did not produce a detectable improvement in recruitment outcomes when embedded within mailed recruitment letters and highlight the need for a more rigorous science of recruitment in dementia caregiving research. Future research should focus on developing and experimentally testing multi-modal, caregiver-centered recruitment strategies that enhance perceived value, reduce barriers to participation, and identify the behavioral mechanisms that drive enrollment decisions. Efforts to optimize recruitment must also consider cost and scalability to ensure that strategies are both effective and feasible in real-world research settings and funding environments.

Abbreviations

ADRD, Alzheimer's disease and related dementias; EHR, electronic health record; IRB, Institutional Review Board; RCT, randomized controlled trial; REDCap, Research Electronic Data Capture; SWAT, Study Within A Trial.

Declarations

Ethics approval and consent to participate

All study procedures, including randomization of recruitment materials and use of EHR-derived information to identify potential participants, were reviewed and approved by the Committee for the Protection of Human Subjects (CPHS), the Institutional Review Board of The University of Texas Health Science Center at Houston (UTHealth Houston), IRB protocol [HSC-SN-23-1003 & HSC-SN-23-1000]. The CPHS waived the requirement to obtain informed consent for participation in the embedded recruitment-methodology SWAT. All methods were carried out in accordance with relevant institutional and federal guidelines and regulations and the Declaration of Helsinki.

Consent for publication

Not applicable.

Availability of data and materials

The data and materials supporting the findings of this study are available from the corresponding author upon reasonable request.

Competing Interests

The authors declare that they have no competing interests.

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Authors' contributions

MY contributed to methodology, formal analysis, visualization, and writing of the original draft. VW contributed to supervision, project administration, and review and editing of the manuscript. AJ contributed to data curation, visualization, and review and editing of the manuscript. AN contributed to data curation and review and editing of the manuscript. NP contributed to data curation and review and editing of the manuscript. CEZP contributed to conceptualization, funding acquisition, investigation, supervision, and writing of the original draft. All authors read and approved the final manuscript.

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Generative AI was used for manuscript editing. All authors reviewed and approved the final manuscript and take responsibility for its content.

References

1. Hirt J et al. *Recruiting Persons With Dementia: A Systematic Review of Facilitators, Barriers, and Strategies.* American Journal of Alzheimer's Disease & Other Dementias®, 2024. 39.10.1177/15333175241276443.
2. Aisen P et al. *Advancing the science of recruitment for Alzheimer's clinical trials: Challenges and opportunities.* The Journal of Prevention of Alzheimer's Disease, 2025. 12(7).10.1016/j.tjpad.2025.100230.
3. Cooper G. *It's time to address the recruitment bottleneck.* The Journal of Prevention of Alzheimer's Disease, 2026. 13(5).10.1016/j.tjpad.2026.100571.
4. Jacobson M et al. *Evaluating evidence-based recruitment strategies for Alzheimer's disease and related dementias clinical trial research: A literature review.* The Journal of Prevention of Alzheimer's Disease, 2026. 13(5).10.1016/j.tjpad.2026.100532.
5. Morrison K, Winter L, Gitlin LN. *Recruiting Community-Based Dementia Patients and Caregivers in a Nonpharmacologic Randomized Trial.* Journal of Applied Gerontology, 2014. 35(7): pp. 788-800.10.1177/0733464814532012.
6. Gilmore-Bykovskyi AL et al. *Recruitment and retention of underrepresented populations in Alzheimer's disease research: A systematic review.* Alzheimers Dement (N Y), 2019. 5: pp. 751-770.10.1016/j.trci.2019.09.018.
7. Blau PM. *Exchange and Power in Social Life*. 2017.10.4324/9780203792643780203792643.
8. Chang AC et al. *Does it Pay to Send Multiple Pre-Paid Incentives? Evidence from a Randomized Experiment.* Finance and Economics Discussion Series, 2024(2024-023): pp. 1-23.10.17016/feds.2024.023.
9. Ulrich CM et al. *Does it pay to pay? A randomized trial of prepaid financial incentives and lottery incentives in surveys of nonphysician healthcare professionals.* Nurs Res, 2005. 54(3): pp. 178 – 83.10.1097/00006199-200505000-00005.
10. Jacobson M et al. *Financial Incentives to Increase Diversity of Older Participants in a Memory Concerns Registry.* JAMA Health Forum, 2025. 6(8).10.1001/jamahealthforum.2025.2273.
11. Treweek S et al. *Trial Forge Guidance 1: what is a Study Within A Trial (SWAT)?* Trials, 2018. 19(1).10.1186/s13063-018-2535-5.
12. Madurasinghe VW et al. *Can we achieve better recruitment by providing better information? Meta-analysis of 'studies within a trial' (SWATs) of optimised participant information sheets.* BMC Med, 2021. 19(1): p. 218.10.1186/s12916-021-02086-2.

Figures

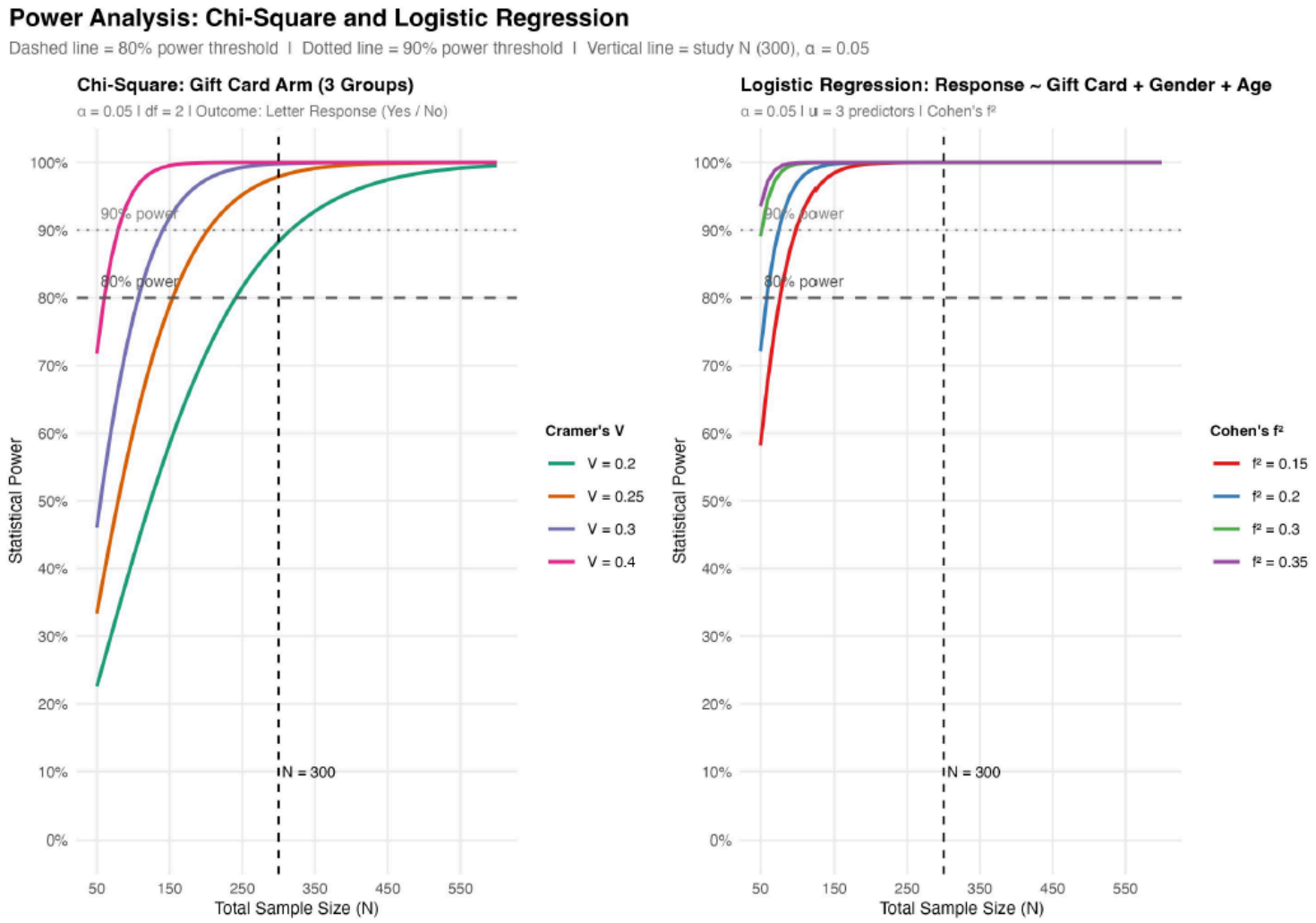


Figure 1

Power Analysis for Chi-Square and Logistic Regression Analyses.
Statistical power as a function of total sample size for the planned chi-square test of independence (left) and multivariable logistic regression model (right). The chi-square analysis depicts power across effect sizes expressed as Cramer's V (V = 0.20, 0.25, 0.30, and 0.40) with 2 degrees of freedom. The logistic regression analysis depicts power across effect sizes expressed as Cohen's f^2 (f^2 = 0.15, 0.20, 0.30, and 0.35) for a model with 3 predictors. The vertical dashed line indicates the study sample size (N = 300); horizontal dashed and dotted lines indicate 80% and 90% statistical power, respectively. All analyses assume a two-sided α = .05.

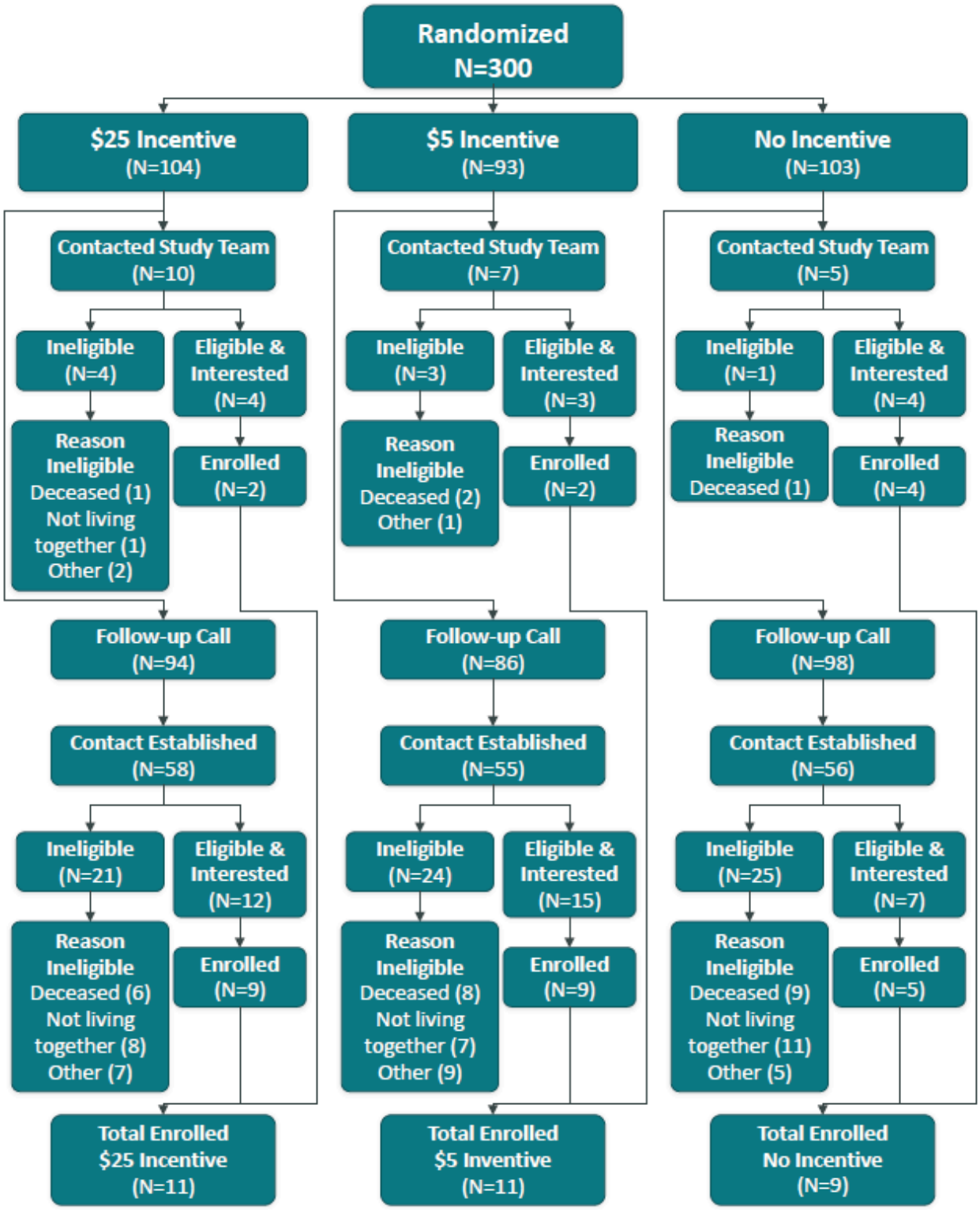


Figure 2

Participant Recruitment, Response, Eligibility, and Enrollment by Incentive Condition.
Flow of 300 potential participants randomized to receive a mailed recruitment letter containing a $25 noncontingent monetary incentive (n = 104), a $5 noncontingent monetary incentive (n = 93), or no incentive (n = 103). The figure depicts direct response to the mailed recruitment letter, eligibility and enrollment among respondents, subsequent telephone follow-up of nonrespondents, successful contact,

eligibility following telephone contact, and final enrollment by randomized condition. Overall, 31 participants enrolled: 11 in the $25 incentive condition, 11 in the $5 incentive condition, and 9 in the no-incentive condition. Reasons for ineligibility are displayed separately for participants responding directly to the mailing and those reached through follow-up telephone outreach.