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Interest and preferences for contingency management design among addiction treatment clientele

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Abstract

Background—Despite strong support for its efficacy, debates persist about how dissemination of contingency management is most effectively undertaken. Currently-promoted contingency management methods are empirically-validated, yet their congruence with interests and preferences of addiction treatment clientele is unknown. Such client input is a foundational support for evidence-based clinical practice.

Objective—This study documented interest in incentives and preferences for fixed-ratio vs. variable-ratio and immediate vs. distal distribution of earned incentives among clients enrolled at three community programs affiliated with the National Institute on Drug Abuse Clinical Trials Network.

Methods—This multi-site study included anonymous survey completion by an aggregate sample of 358 treatment enrollees. Analyses first ruled out site differences in survey responses, and then tested age and gender as influences on client interest in financial incentives, and preferences for fixed-ratio vs. variable-ratio reinforcement and immediate vs. distal incentive distribution.

Results—Interest in different types of $50 incentives (i.e., retail vouchers, transportation vouchers, cash) was highly inter-correlated, with a mean sample rating of 3.49 (.83) on a five-point scale. While consistent across client gender, age was an inverse predictor of client interest in incentives. A majority of clients stated preference for fixed-ratio incentive magnitude and distal incentive distribution (67% and 63%, respectively), with these preferences voiced by a larger proportion of females.

Conclusion—Sample preferences contradict currently-promoted contingency management design features. Future efforts to disseminate contingency management may be more successful if flexibly undertaken in a manner that incorporates the interests and preferences of local client populations.

For nearly two decades, an Institute of Medicine [1] call to bridge ‘science-to-practice gaps’ has influenced addiction treatment research and policy. Two outgrowths are the National Institute on Drug Abuse’s Clinical Trials Network [2] as a platform to test real-world effectiveness of promising treatment practices, and the Substance Abuse and Mental Health Services Administration’s National Registry of Evidence-Based Programs and Practices (http://nrepp.samhsa.gov) as a public-access repository of such practices. Contingency

Declaration of Interest

The authors report no declarations of interest.

management is one such practice, for which clinical effectiveness has been demonstrated in the Clinical Trials Network [3, 4] and multiple listings in the National Registry of Evidence-Based Programs and Practices are available. Already a focus of 200+ published treatment trials with substance abusers [5], contingency management is governed by operant conditioning principles with core tenets as recently outlined by Petry [6] that: 1) a desired client behavior be monitored and documented, 2) a tangible, positive incentive be provided when the behavior occurs, and 3) the incentive be withheld when the behavior does not occur. Other design features for contingency management interventions, like the item(s) available to clients as incentives and distribution of client opportunities to earn such incentives over time, are malleable and open to contextual adaptation. Despite methodological variance precipitated by such malleability in design features, multiple meta-analyses emphasize reliable therapeutic effects of contingency management interventions among individuals with substance use disorders [7–10]. Still, debates persist concerning the fiscal, logistical, and philosophical utility of particular incentives and reinforcement schedules in contingency management interventions to be disseminated to the addiction treatment community [11, 12].

In discussing contemporary evidence-based practice, Spring [13] offers the metaphor of a *three-legged stool* in which optimal care relies on knowledge of research evidence, clinical expertise, and integration of client preferences. With respect to debates about the incentives and reinforcement schedules incorporated as contingency management design features, client preferences have received comparatively little attention. According to Higgins and colleagues [14], it is widely-accepted that the most useful incentives represent something of value to the client, and that the most effective reinforcement schedules incorporate immediacy and prospective earning of ‘high-magnitude’ incentives. Even so, contingency management purveyors and treatment professionals struggle to find consensus about what are both salient and therapeutically-useful incentives as well as what are both feasible and clinically effective reinforcement procedures [11, 15, 16]. This may be a partial product of choice as empirical support exists for the efficacy of a range of procedurally-diverse methods, most notably for escalating and prize-based contingency management interventions [17–19]. Unfortunately, these debates to date have made little room for clients to voice their preferences concerning design features of contingency management interventions, even as large-scale dissemination activities have taken foot in the addiction treatment community.

One such activity is dispersion of promotional materials, marketed under a *Motivational Incentives* moniker (www.bettertxoutcomes.org/bettertxoutcomes), that advocate use of variable-ratio reinforcement (e.g., wherein one wins prizes of varying magnitude) and immediate distribution of earned incentives. There are now data available to demonstrate the extent to which targeted advocacy of these specific contingency management design features can influence the choices of community-based addiction treatment settings. Specifically, a national contingency management initiative involving 77 substance abuse treatment clinics in the Veterans Affairs system [20] incorporated the aforementioned promotional materials in the training of the clinic leaders, eventuating in 99% of the Veterans Affairs settings later reporting attempted implementation of contingency management interventions with variable-ratio reinforcement and immediate distribution of incentives as primary design

features. This is a clear example of how influential the marketing of specific interventions by contingency management purveyors and their promotional materials can be. While some herald this as an example of successful therapy dissemination, there is much unknown about this Veterans Affairs initiative—including the success or sustainment of attempted implementation by these clinics. Also unknown is the extent to which treatment clientele in these settings, or the addiction treatment community at-large, would voice interest in and congruent preferences for the involved contingency management design features. Indeed, several past contingency management dissemination efforts have attributed success at least in part to the elicitation and integration of input from setting personnel about contingency management design features, with such input often incorporating perceived client interests [21–24]. For contingency management to broaden its appeal for dissemination to a heterogeneous addiction treatment community, direct elicitation of client input about contingency management design features may be needed to improve the balance of our metaphorical stool.

In contrast to a growing number of recent studies to examine acceptability of contingency management among treatment professionals, research on its acceptability among clients is scant and predominantly archival. Early studies, conducted with clients at opiate treatment programs, identified the potency of clinic privileges (e.g., take-home methadone doses, preferred dosing times) as incentives in these settings [25, 26]. Later emergence of voucher-based methods prompted studies [27, 28] that documented client interest in financial rewards (e.g., free medication or services, gift certificates or cash), and identified the financial value clients perceive privilege-based incentives to hold in terms of time and convenience [29, 30]. Two, more recent studies expanded this focus to clients enrolled in abstinence-based settings [31, 32], each finding substantial unexplained variance in client interest in incentives. In assessing the interests of staff and clients, Roll and colleagues [32] note incongruence in perceived value of many incentives. This underscores the value of directly eliciting client perspectives about contingency management design features.

Despite consistent findings in extant literature that most client demographic and background attributes do not predict efficacy of contingency management interventions [33–38], such attributes may help explain variability in their interest in incentives as well as predict their preferences for fixed-ratio vs. variable-ratio reinforcement and immediate vs. distal distribution of earned incentives [39, 40]. Whereas literature on client age as a specific influence on contingency management efficacy is equivocal [41–43], the more generally weak engagement of younger adult client populations in substance abuse treatment, and consequent poor retention, is well-documented [44–46]. Availability of incentives as an engagement strategy may be more apt to pique the interest of such young adult treatment-seekers. Likewise, it is conceivable that client preferences concerning fixed-ratio vs. variable-ratio reinforcement and immediate vs. distal distribution of earned incentives may differ over the lifespan, perhaps as a function of age-related variations in economic stability among individuals with substance use disorders [47, 48].

While the efficacy of contingency management interventions does not appear to be strongly influenced by gender [49], this is another demographic attribute that may influence client interest in incentives as well as preferences for fixed-ratio vs. variable-ratio reinforcement

and immediate vs. distal delivery of earned incentives. One national estimate suggests 32% of substance abuse treatment recipients are women [50], many of whom have dependent children for whom they are the primary caregiver [51, 52]. This socioeconomic challenge may alter traditional biases ascribed to those with substance use disorders, such as their oft-cited propensity for delay discounting [53], and thereby beget preference for design features that provide more assurance and security for earned rewards. One example of such a design feature is fixed-ratio reinforcement, insofar as it provides more assurance of a specified dollar amount to be received. A second example is distal delivery of earned incentives, which enables earned financial resources to be accrued in a secure fashion for which the client then has opportunity to plan for their eventual access and use. It is conceivable that clients facing particular socioeconomic challenges during early recovery may find such design features appealing.

The current study seeks to address previously unanswered questions concerning client interest in incentives as well as preferences some key contingency management design features. In this multisite effort, anonymous survey data was collected from individuals actively enrolled in substance abuse treatment services at one of three community treatment programs affiliated with the Clinical Trials Network's Pacific Northwest Node. In this survey, clients reported their relative interest in a range of specific types of incentives, as well as preferences for fixed-ratio vs. variable-ratio reinforcement and immediate vs. distal distribution of earned incentives. The resulting data provide means to identify interests and preferences for contingency management design in a large, diverse sample of treatment enrollees, and to test the extent to which these may vary as a function of age and gender. Through greater insight into client interests and preferences for design aspects of this behavior therapy, prospects for its broader and more effective dissemination may be improved.

Method

Treatment Programs

Study recruitment involved three collaborating treatment programs, each located within Washington state. Table 1 lists setting characteristics of the treatment programs (i.e., county-based local population density, primary funding source, available treatment modalities, annual patient census) and their clients (i.e., subsample size, gender distribution, mean age). Of further note, the respective geographic locations encompass three strata of local population density (i.e., small <750,000; medium 750,001 – 1,500,000; large >1,500,001), based on 2014 United States Census Bureau statistics. This three-tier classification was previously used to as a selection criterion to recruit nationally-representative community treatment partners [54].

Procedures

All study procedures were approved by the local university institutional review board. Enrolled clients at the treatment programs were informed that: 1) participation was voluntary and would not influence access to or receipt of any clinic service, 2) survey completion would take approximately 5 minutes, 3) responses would remain anonymous, and 4) no

compensation was available. Surveys were distributed by counselors or other treatment program staff during a regular clinic visit. In an effort maintain anonymity, clients received specific instruction to omit their name from the survey and return it once completed to a designated 'drop-off envelope' later mailed to study investigators. Upon receipt of these surveys, study staff entered survey responses into a secure, electronic database. Of the 401 surveys distributed at the three treatment programs, 358 (89%) were returned fully completed and these comprise the sample reflected in all study analyses to be described herein.

Measures

Efforts to maintain client anonymity limited the demographic dimensions gathered to age and gender. Initial survey instructions outlined in lay language the hypothetical nature of the survey, cited two examples of target behaviors for which client efforts could be reinforced, and then elicited ratings of interest in a range of incentives. Specifically, survey instructions read, "We are trying to find out what types of rewards would help people stay clean. If you were being rewarded for a clean UA or for attending your treatment sessions, which things would you like?" The survey then elicited ratings of interest on a 5-point scale (i.e., 1 = would not like at all, 5 = would really like) for each of 14 types of $50 incentives. Thirteen categories of voucher-based incentives were for their use: 1) at a grocery store, 2) at an electronics store, 3) at a clothing store, 4) at a restaurant, 5) at a drug store, 6) at a hotel, 7) for an iTunes purchase, 8) at a coffee shop 9) at a gas station, 10) for movie tickets, 11) for sporting event tickets, 12) for lottery tickets, and 13) for bus passes. The 14th survey category similarly assessed interest in cash as a financial incentive. Sample frequencies and descriptive statistics for each of the 14 types of financial incentives are listed in Table 2. A preliminary scale reliability analysis evaluated internal consistency among the fourteen survey items, with resulting Cronbach alpha (α = .83) that supported data reduction to an overall scale score representing interest in incentives.

The survey also contained two binary items concerning fixed-ratio vs. variable-ratio reinforcement, and immediate vs. distal distribution of earned incentives. Each item was framed for the client to respond by choosing a preference with instructions that read, "If you were able to earn vouchers, would you rather….". For the item concerning fixed-ratio vs. variable-ratio reinforcement, both response options involved immediate delivery of earned incentives each week but varied whether the magnitude was fixed at $50 (i.e., "earn $5 each week for 10 weeks") or variable at $0–500 (i.e., "participate in a weekly drawing in which you could win between $0 and $50 each week"). For the item concerning timing of incentive delivery, both response options incorporated $50 in fixed-ratio reinforcement, but the two response options varied as to whether earned incentives were distributed immediately each week (i.e., "earn $5 per week for 10 weeks") or distally (i.e., "save weekly points for 10 weeks to earn $50").

Data Analyses

The multisite nature of the study design necessitated initial consideration of its nested data structures (e.g., clients within clinics), specifically via preliminary analyses evaluating potential site differences in dependent variables of interest level in financial incentives,

incentive magnitude preference, and incentive distribution preference. Interest in financial incentives was a continuous index; thus, a random-effects analysis of variance identified site-level variance with computation of an intra-class correlation reflecting the 'within-sample correlation.' Given the binary survey response options available to assess client preferences for incentive magnitude and distribution, chi-square analyses examined potential site differences. The corresponding results of these collective preliminary analyses (as later described) informed the decision to subsequently exclude site as a predictor in the primary study analyses.

The primary study analyses included client age and gender as potential predictors of interest in financial incentives as well as preferences for incentive magnitude and distribution. With respect to the summary score representing client interest in financial incentives, a linear regression was conducted that included gender (female, male), and age (continuous). Client preference for incentive magnitude (binary: fixed-ratio, variable-ratio) and incentive distribution (binary: immediate, distal) involved conduct of logistic regressions, each similarly including client gender and age as predictors.

Results

Preliminary Evaluation of Potential Site Differences

A random-effects analysis of variance, focused on examining potential between-site variance in client interest in incentives, indicated that differences among client groups from the three treatment programs were minimal. In terms of covariance parameters, the estimate of overall residual variance (.68, *SE* = .05) was much greater than that specifically attributable to the intercept (.02, *SE* = .03), which represented site. The resulting intra-class correlation was . 03, well below a suggested threshold for distinguishing linked units in a nested design [55]. Likewise, both of the chi-square analyses that tested for between-site variance in client preference for incentive magnitude and distribution were non-significant (X^2-values <1.85, both *p*-values >.40). Taken together, these collective results offered no evidence for between-site differences in the survey responses of treatment program clientele, and supported the decision to exclude site as a predictor in all subsequent study analyses.

Interest in Earning $50 Incentives

Mean interest across these 14 categories of voucher- and cash-based incentives was 3.49 (*S.D.* = .83). In the corresponding linear regression, the two demographic predictors (client age and gender) explained 1.7% of the variance in client interest in incentives [R^2 = .022; F (2,357) = 4.06, p<.05]. Age was statistically significant as an inverse predictor of interest in these incentives [standardized β = −.15, t(355) = −2.85, p<.01], whereas gender had no apparent influence [standardized β = .00, t(355) = −.02, p>.98].

Preference for Fixed-Ratio vs. Variable-Ratio Reinforcement

Preference for fixed-ratio rather than variable-ratio reinforcement was indicated by 67% of the client sample. The corresponding logistic regression model was statistically significant, χ^2 (2) = 6.36, p<.05. The two demographic predictors explained 2.5% of the variance (Nagelkerke R^2) in client preferences for fixed-ratio vs. variable-ratio reinforcement, and

correctly classified 68% of cases. While client age did not emerge as a significant predictor [standardized $\beta = .01$, *Wald* (1) = 1.21, $p > .27$), gender did predict client preferences for fixe-ratio vs. variable-ratio reinforcement [standardized $\beta = .50$, *Wald* (1) = 4.89, $p < .05$]. Specifically, fixed-ratio incentive magnitude was preferred by a greater proportion of females (72%) than males (61%).

Preference for Immediate vs. Distal Distribution of Earned Incentives

Preference for distal rather than immediate incentive distribution was indicated by 63% of the client sample. This corresponding logistic regression model was statistically significant, χ^2 (2) = 6.78, $p < .05$. The two demographic predictors explained 2.6% of the variance (Nagelkerke R^2) in client preferences for immediate vs. distal distribution of earned incentives, and correctly classified 64% of the cases. While client age again failed to emerge as a significant predictor [standardized $\beta = -.01$, *Wald* (1) = .34, $p < .56$], gender was similarly revealed to predict client preference for immediate vs. distal distribution of earned incentives [standardized $\beta = .56$, *Wald* (1) = 6.24, $p < .05$]. Specifically, distal incentive distribution was preferred by a greater proportion of females (69%) than males (56%).

Discussion

This multisite effort utilized anonymous survey data collected from individuals enrolled in substance abuse treatment services at one of three Clinical Trials Network-affiliate treatment programs in Washington state, with survey content focused on their interest in financial incentives and preferences for contingency management design features concerning the certainty with which incentives are earned and timing with which they are delivered. Study analyses revealed interests in different types of $50 incentives (i.e., retail vouchers, transportation vouchers, cash) were highly inter-correlated. Mean level of interest in incentives was minimally variable across sites and between client gender. Client age, however, was revealed as an inverse predictor of interest in these incentives such that youth was associated with greater interest. Of some surprise, this multisite client sample evidenced clear preferences for fixed-ratio reinforcement and distal distribution of earned incentives distribution as contingency management design features. Notably, these client preferences are at odds with contingency management design features that aforementioned *Motivational Incentives* promotional materials advocate—and for which efficacy for shaping client behavior is well-established [14, 53]. While preference for fixed-ratio reinforcement and distal distribution of earned incentives was evident among a majority of both male and female clients in this sample, the current study data document these preferences to be held by a greater proportion of females.

If one returns to Spring's [13] metaphorical three-legged stool, current findings may pose a balancing dilemma for purveyors of this therapeutic approach. Variable-ratio reinforcement is highlighted in National Institute on Drug Abuse promotional materials because specific methods like Petry's [19] prize-based approach have shown clinical utility [3, 4] and comparative cost-effectiveness [56]. Likewise, immediate distribution of earned incentives are similarly highlighted in those promotional materials because it minimizes biases of delay discounting [53]. Nevertheless, current findings suggest a solid majority (67% and 63%,

respectively) of a multisite treatment enrollee sample would actually prefer the alternative of fixed-ratio reinforcement and distal distribution of earned incentives. Some may argue any given client's stated preferences are subject to preference reversal (i.e., a circumstance wherein an alternative option to a hypothetically-voiced preference is instead adhered to when the choice is faced in reality [57]). While this possibility cannot be ruled out at an idiographic level, the fact that current findings were consistent across enrolled clients at three Clinical Trials Network-affiliate programs and across age-defined strata within those client groups should strengthen the weight given the stated preferences of the majority of this aggregate client sample. Accordingly, a dilemma for therapy purveyors seeking to disseminate contingency management to the addiction treatment community is whether one holds firmly to promoting standardized implementation of a specific behavioral reinforcement method across health settings, or approaches this more flexibly such that corresponding methods may be tailored to incorporate preferences of local clientele. Contextual adaptability is heralded as one of the strongest translational attributes of contingency management [58], and more broadly a growing consensus of experts posit flexible setting adaptation as necessary to effective behavior therapy dissemination [59, 60]. This, taken together with reliable therapeutic effects noted in meta-analyses of procedurally-diverse methods of behavioral reinforcement with individuals with substance use disorders [7–9], suggests a flexible approach to disseminating contingency management merits consideration.

Current findings also shine a light on how interest in incentives and preferences for contingency management design features may be influenced by client demography. With respect to enthusiasm for incentives, age was an inverse predictor among this sample of addiction treatment clientele. This may reflect the utility of incentives as a strategy to improve the otherwise weak engagement of young adult treatment-seekers in substance abuse treatment services [44–46]. In absence of other sociodemographic data (i.e., employment/income) for this sample of treatment enrollees, this finding should be cautiously interpreted. Though prior research suggests such sociodemographic dimensions have little or no influence on efficacy of contingency management interventions [36–38], future research is needed to investigate potential interactive relations between these dimensions and client age in predicting enthusiasm for incentives. In addition to providing useful replication of the current age-based finding, future longitudinal research may also clarify the extent to which interest in incentives fluctuates over time and in accord with age-related variations in economic stability [47, 48]. Gender was a reliable predictor of contingency management design preferences in current study analyses, with a larger proportion of female clients citing preference for fixed-ratio reinforcement and distal distribution of earned incentives It is conceivable that preference for such features may reflect desire for certainty about financial support, as many females in treatment deal with particular socioeconomic challenges [51, 52]. Of course, an absence of comprehensive sociodemographic data for the current sample suggests cautious interpretation, and need for future research. Notably, a comparatively smaller yet still majority of male clients in the current sample indicated similar preference for fixed-ratio reinforcement and distal distribution of earned incentives. This may reflect a more universal bias toward 'loss aversion' ascribed to substance abusers [61], which may be accentuated during their

enrollment and participation in abstinence-focused therapeutic services. Accordingly, substance abuse treatment enrollees may be more apt to employ calculated, risk-averse strategies such as: 1) seeking smaller albeit more certain financial incentives as a reward for demonstrating treatment adherence, and 2) allowing earned incentives to accrue in a secure manner that enables planful eventual spending.

Study caveats bear mentioning. Prominent among these may be questions about the generalizability of study findings, though the multisite study design and absence of site differences in preliminary study analyses may mitigate this broad area of concern. Prior research notes that staff of Clinical Trials Network-affiliate programs are more familiar with contingency management than are those working in the addiction treatment community at-large [62]. What impact this setting characteristic may have on the representativeness of their treatment-seeking clientele, and the stated preferences of those clientele, is difficult to know. Relatedly, that one of the treatment programs offers services exclusively to females is a confound, though notably results of preliminary study analyses detailed herein offered no evidence of differential survey responding between client subsamples at these sites. As with any study, independent replication of the reported findings would provide additional assurance of their veracity and consequently these findings should be interpreted with caution. Study reliance on survey methodology may also be seen as a limitation, though procedures were implemented to maintain anonymity of survey response during data collection and thereafter. This may have served as a protective factor against socially-desirable responding, though other influences (i.e., self-selection, voluntary response bias) cannot be ruled out. Targeted sampling of persons actively enrolled in treatment services increased the salience of stated contingency management interest and design preferences for use of behavioral reinforcement to promote treatment adherence, but also prevented study findings from incorporating such interests and preferences among individuals with substance use disorders who are not actively receiving such treatment services. Reliance on written survey instructions provided no guarantee participating clients fully understood all survey content, particularly given that clients were not being enrolled in a contingency management treatment trial. To mitigate respondent confusion, the wording of survey items was intentionally kept simple, though perhaps at the expense of incorporating explanations about the complicated probabilities and potential earnings inherent in some contemporary contingency management interventions. Finally, the absence of more comprehensive sociodemographic data from the participating clients is both a further study limitation, and an important direction for future research on client perspectives about contingency management.

Caveats notwithstanding, the study offers a glimpse into client perspectives about design features of contingency management interventions. If optimal care rests on empirical evidence for treatment practices, clinical expertise in their timing and delivery, and incorporation of client preferences concerning their application [13], the field needs to further explore client perspectives about the treatment practices they encounter. The growth in popularity of implementation/effectiveness trials, and widely-cited typology of corresponding hybrid designs [63], offers a methodological avenue whereby client perspectives are elicited via formative and summative evaluation, implementation of contingency management interventions designed with client input is evaluated, and the

corresponding clinical effectiveness of such interventions is then documented. The current study is an example of how exploration of client perspectives may reveal unrecognized, even paradoxical issues about design features of empirically-supported treatment practices. To effectively address incongruence between design features validated in controlled treatment trials and voiced preferences of targeted clientele in community settings, the specific points of incongruence must first be known. In the case of contingency management, current findings suggest there may be merit in a more flexible approach to dissemination of behavioral reinforcement interventions targeted to individuals with substance use disorders.

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Table 1

Setting and Client Characteristics of Participating Treatment Programs

	Treatment Program #1	Treatment Program #2	Treatment Program #3	Aggregate Sample
Setting Characteristics				
County Population Density	759,583	2,079,967	247,687	
Primary Funding Sources	private	private	public	
Treatment Modalities	residential/outpatient	residential/outpatient	residential/outpatient	
Annual Patient Census	550	450	700	
Client Characteristics				
Size	n = 215	n = 73	n = 70	N = 358
Gender Distribution	42.30% female	100.00% female	58.60% female	57.30% female
Mean Age (S.D.)	35.47 years (11.12)	40.62 years (12.12)	34.89 years (12.19)	36.40 years (11.71)

Table Notes: County population densities estimated for corresponding Washington state county, per 2014 United States Census Bureau statistics; other setting characteristics identified via treatment program websites; client characteristics reflect cases included in study analyses.

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Table 2

Sample Ratings of Interest in Types of Incentives

Type of $50 Incentive			Item Endorsement by Scale Level				
	M	(SD)	1	2	3	4	5
Cash	4.68	.092	4%	1%	3%	6%	86%
Grocery Store Voucher	4.30	1.10	3%	6%	10%	17%	67%
Gas Station Voucher	4.09	1.42	13%	4%	9%	11%	64%
Clothing Store Voucher	4.08	1.29	8%	6%	12%	17%	57%
Movie Ticket Voucher	3.62	1.41	13%	10%	21%	16%	40%
Electronics Store Voucher	3.57	1.52	17%	9%	16%	15%	43%
Restaurant Voucher	3.50	1.45	16%	10%	18%	22%	35%
Coffee Shop Voucher	3.39	1.56	19%	13%	16%	14%	37%
Drug Store Voucher	3.27	1.57	22%	12%	18%	14%	34%
Sporting Event Ticket Voucher	3.12	1.64	28%	10%	17%	11%	34%
Hotel Voucher	2.86	1.60	32%	14%	17%	11%	26%
Lottery Ticket Voucher	2.84	1.65	35%	11%	16%	10%	28%
Bus Pass Voucher	2.79	1.77	42%	8%	11%	6%	33%
iTunes Voucher	2.58	1.63	43%	11%	15%	8%	23%

Table Notes: All ratings provided on a five-point scale (1 = would not like at all, 5 = would really like); Mean ratings and item endorsement based on aggregate study sample of N=358 enrollees at one of three treatment programs.