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THE ROLE OF ALCOHOL USE DISORDER IN NORMATIVE CHANGES IN NOVELTY SEEKING DURING YOUNG ADULTHOOD

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Introduction

❖ Most research on personality development has shown a mean decrease in disinhibited personality and behavioral undercontrol during young adulthood.

❖ However, some individuals do not show this decrease.
- Sher et al. (2004) proposed that substance use disorders can cause a *developmental lag*, such that individuals with these disorders can be delayed in achieving the age-related decrease in behavioral undercontrol.
- The mechanism of this delay has been described as a *developmental snare*, in which substance use disorders inhibit normative declines in psycholopathology and problem behavior (Hussong et al., 2004).

Purpose

❖ The purpose of the current analyses was to examine the role of alcohol use disorders (AUDs; alcohol abuse or dependence) in the change in disinhibited personality during young adulthood.
- Novelty Seeking was chosen because, among measures of behavioral undercontrol in the current study, it shows the largest age-related decrease.

Sample

❖ Initial sample of first-year college students (Year 1)
- *N*=489 (47% men; 51% with family history of alcoholism)
- Mean age=18.2 years (SD=0.96)
- Assessed with self-report questionnaires and interview

❖ Six follow-up assessments (Years 2, 3, 4, 7, 11, and 16)

❖ 340 participants (70% of the Year 1 sample) provided complete data at all time points.

Measures

❖ Novelty Seeking
- Measured by the short version of the Tridimensional Personality Scale (Cloninger, 1987; Sher et al., 1995)
- Administered at Years 1, 7, 11, and 16 of the study

❖ Past-year Alcohol Use Disorders
- DSM-III diagnoses as measured by the Diagnostic Interview Schedule (DIS-III-A [Robins et al., 1985])
- Assessed at all time points

Analyses

❖ To find heterogeneous growth patterns of AUDs, a cluster analytic technique was used to classify subjects.

❖ The clustering procedure employed is based on traditional K-means clustering, but differs in that the longitudinal nature of the data is accounted for (Steinley et al., 2006).

❖ Repeated measures ANOVA
- Overall tests of time, AUD group, and sex effects, between-subjects contrasts, and profile contrasts

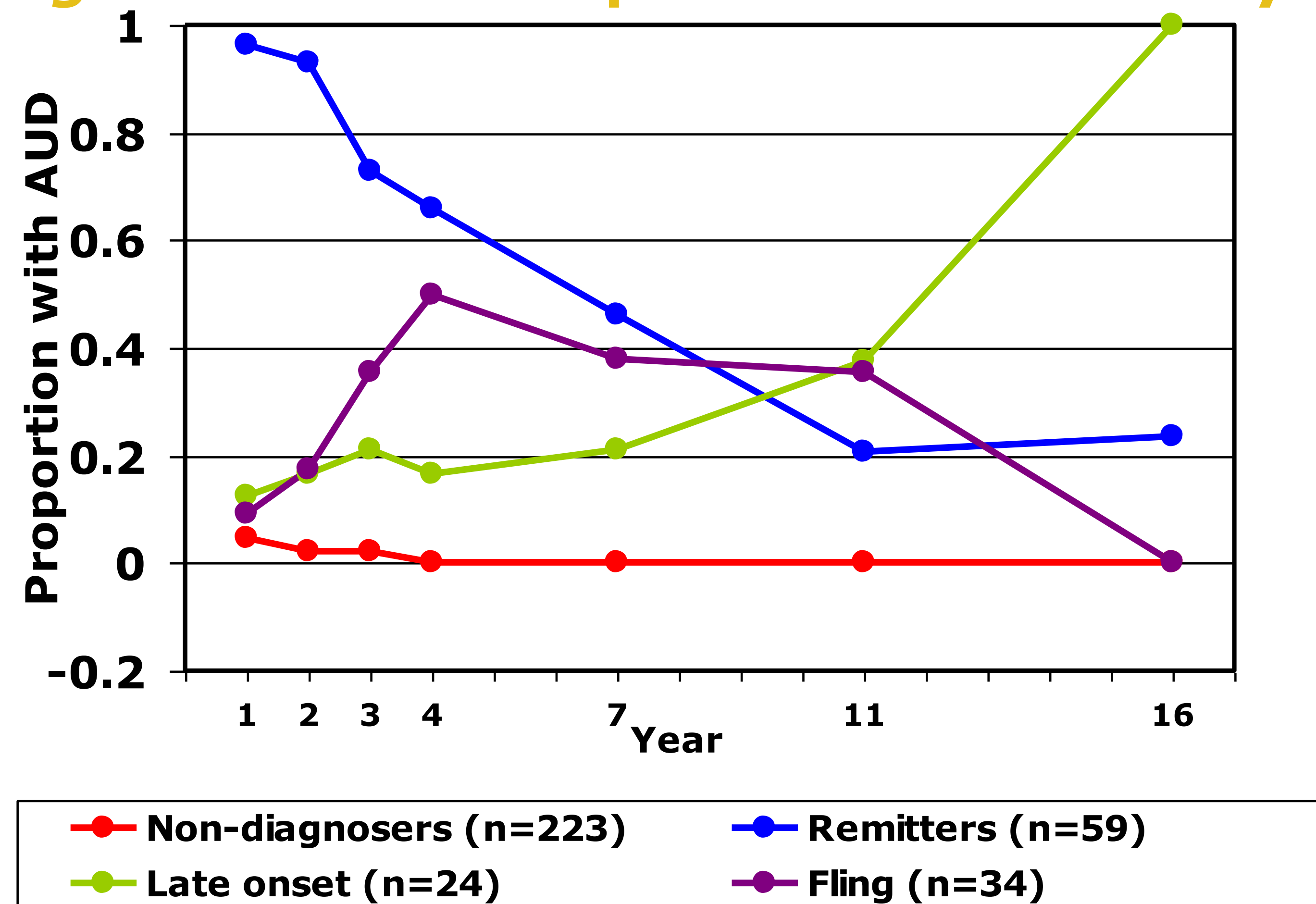### Figure 1. AUD Groups from Cluster Analysis

Non-diagnosers (n=223)   Remitters (n=59)
Late onset (n=24)   Fling (n=34)

Figure 2. Short TPQ Novelty Seeking Scores

Note. Means shown are controlling for sex.
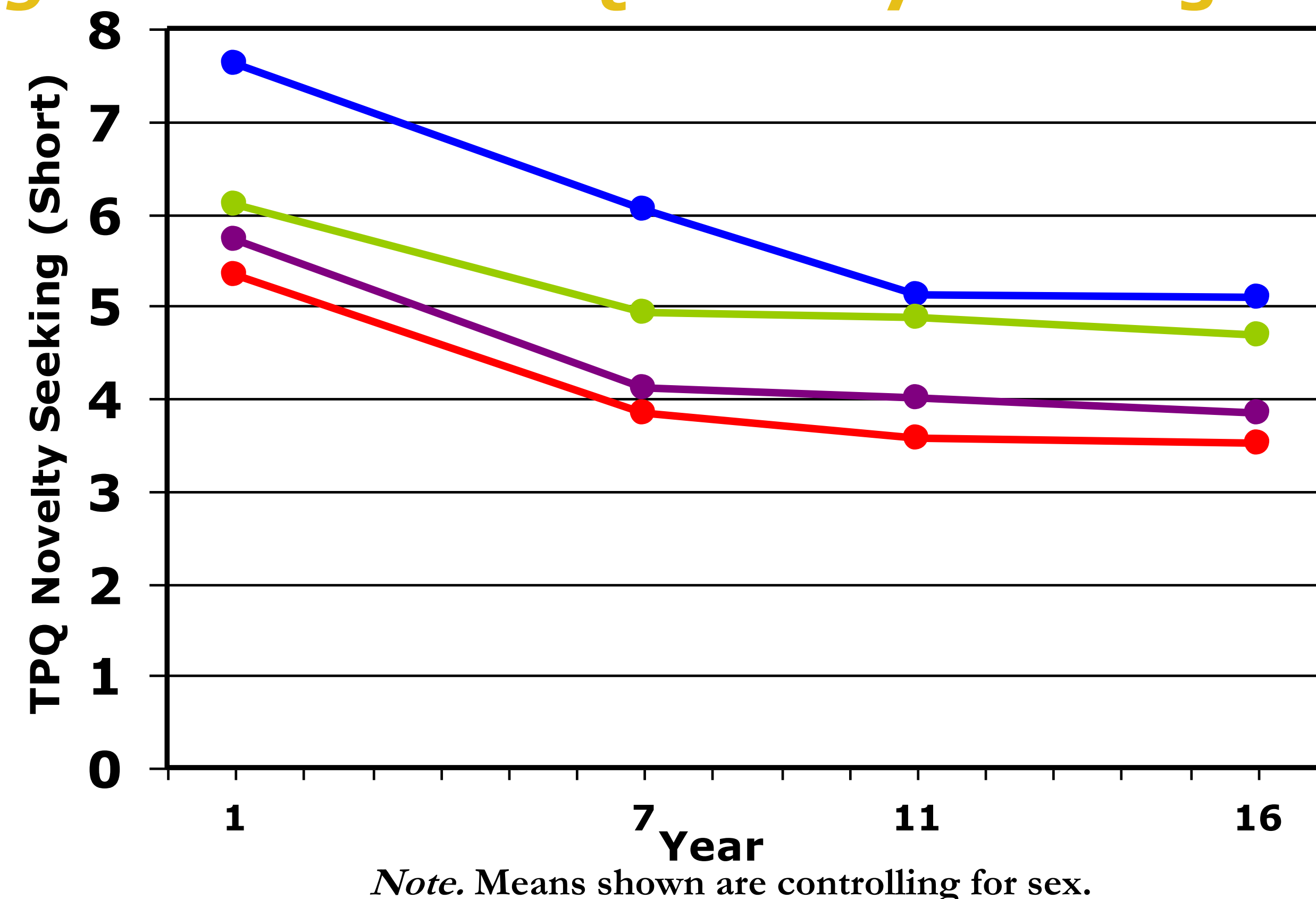
Table 1. Predictors of Novelty Seeking

Effect	F	df	p
Time	34.13	3	<.0001
AUD Group	10.69	3	<.0001
Sex	0.10	1	.7526
Sex X AUD Group	0.71	3	.5471
Time X AUD Group	0.73	9	.6773

Table 2. Between-Subject Contrast Analyses

Contrast	F	df	p
Non-diagnosers vs. all others	16.77	1	<.0001
Remitters vs. all others	14.71	1	.0001
Late onset vs. all others	0.44	1	.5093

Table 3. Profile Contrast Analyses

	F		
Contrast	Yr. 1 vs. 7	Yr. 7 vs. 11	Yr. 11 vs. 16
Non-diagnosers vs. all others	0.01	0.09	0.06
Remitters vs. all others	0.12	3.94*	0.11
Late onset vs. all others	0.35	0.61	0.06

Note. *p* < .01; All *df*=1.

Results

❖ The cluster analysis resulted in a four-group solution, chosen based on maximizing the variance (53% in the present solution) accounted for relative to the number of groups.
- The four groups are shown in Figure 1.

❖ There were significant effects of time and AUD group on Novelty Seeking scores.

❖ The sex, sex X AUD group, and time X AUD group effects were all nonsignificant.
- Least squares means are shown in Figure 2, and the results from the repeated-measures ANOVA are presented in Table 1.

❖ Between-subjects contrasts compared a priori groups over the course of the study (effects shown in Table 2)
- Non-diagnosers vs. all others (p < .0001)
- Remitters vs. all others (p=.0001)
- Late onset vs. all others (nonsignificant)

❖ Profile contrasts compared the a priori groups at specific time intervals (effects shown in Table 3)
- Late onset vs. all others (nonsignificant for all intervals)
- Remitters vs. all other (significantly different between Years 7 and 11 of the study)
- Late onset vs. all others (nonsignificant for all intervals)

Conclusions

❖ AUD groups, based on cluster analyses, predicted Novelty Seeking scores over the course of the study.
- Individuals who did not diagnose at any time point consistently had the lowest levels of Novelty Seeking, whereas the Remitters had the highest levels.

❖ In general, Novelty Seeking decreased over time.

❖ We found evidence for a developmental delay in achieving normative levels of Novelty Seeking among the Remitters such that their Novelty Seeking scores did not stabilize until later as compared to the other AUD groups.

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