

Irving K. Barber School of Arts and Sciences

a place of mind

Literature Review

- Human behaviour can be classified using Kahneman's (2015) two system dual processing model where System 1 is fast acting and implicit, while System 2 is slow and explicit.
- A limitation of explicit, self-report measures is that participants will only report what options they can, in a deliberate manner, to specific question (Nisbett & Wilson, 1977). Answers may be biased by social desirability, ability to rethink answers, and experimenter demands (Paulhus & Vazaire, 2007).
- Implicit measures aim to quantify automatic processes using reaction time tasks.
- Efficacy of implicit measures over explicit alternatives has been demonstrated in the context of measuring risk-taking (Lejuez et al., 2002; Swogger, Walsh, Lejuez, & Kossen, 2010), racism (Owald et al., 2013), and aggressiveness (Gawronski & Dehouer, 2014).
- Alcohol Use Disorders cost the US health-care system \$64 million last year (Schuckit, 2017).
- An effect size analysis review found implicit Approach Avoidance measures to be effective in

Hypothesis

• The Alcohol categories of the improved Approach Avoidance Task will predict the level of drinking alcohol in general, getting drunk, and a diagnosable level of alcohol use.

Participants

• 112 Undergraduate Students recruited through the UBCO Psychology SONA system. • 81 Females, 31 Males, M age = 19.96, SD = 1.82

Discussion

- As the Difference scores between <u>Alcohol AAT Images increased</u>, the amount that they identified with problem drinking behaviour on the AUDIT, drank recently, and got drunk recently decreased.
- As the Difference scores between Non-Alcohol AAT Beverage Images increased, the amount that they identified problem drinking behaviour on the AUDIT and got drunk recently also increased.

Conclusions, Limitations, & Future Research

- This research supports the hypothesis that this version of the AAT can predict alcohol recency and AUDIT variables. A linear relationship can be seen between these variables.
- More research is needed with a larger and more diverse sample size to extrapolate external validity.
- Non-Alcoholic Beverage reaction time should be more closely assessed as it may reveal other relationships relevant to the field of studying behaviour and addictions.
- Future research should look at how behaviour changes over time and may attempt to modify behaviour using implicit measures such as this non-clinical sample suitable version of the AAT.

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assessing and training against problem alcohol use (Kakoschke, Kemps, & Tiggemann, 2017).

Creating and Testing A Computerized Approach Bias Assessment Tool for Implicit Alcohol Cognitions. Marin-Beke C., & Krank M.D.

Methods

This study used a heavily modified version of the Approach Avoidance Task (AAT), originally designed for the anxiety disorders (Rinck & Becker, 2007). In the AAT, participants are measured on reaction time and instructed to respond to a picture based on an irrelevant feature (e.g., portrait versus landscape orientation) by pushing or pulling a



(Paslakis et al., 2016)

• Alcohol Use Disorder Identification Test (AUDIT; Saunders, Aasland, Babor, Fuente, & Grant, 1993), 10 items, scored Low risk (0-7), Medium risk (8-15), High risk (16+). • Questions about the last time drank alcohol and last time got drunk. • AAT difference scores, AUDIT, last time drank, and last time drunk variables were compared using bivariate correlations and confirmed by ordinal and multiple regression. • Graphs show the direction of the significant results of the regression analyses.

Got drunk

							R	es
Descriptive Statistics	5				Corre	lations		•
	Mean	Std. Deviation	N	2	3	4	5	
1. Alcohol Pictures	3.59	113.03	112	0.07	-0.24**	-0.23**	-0.14	
2. Non-alcoholic Beverage Pictures	15.14	119.62	112		0.13	0.17*	0.19*	
3. Drank alcohol	4.07	1.13	112			0.72***	0.73***	
4. Got drunk	3.54	1.31	112				0.72***	
5. AUDIT	9.95	4.61	112					
Correlation is signification	ant at the	* 0.05 level;	** 0.01 leve	l; and ***	0.001 level.			

200.0 120.0 150.0 100.0 80.0 100.0 60.0 40.0 50.0 20.0 0.0 -20.0 -40.0 -50.0 -60.0 month week

Drank alcohol





ate correlation analyses revealed strong

ve correlations (**pull bias**) between Alcohol AAT ence scores and last time alcohol use variables. There so a marginal negative correlation between <u>Alcohol</u> lifference scores and the AUDIT. Alcohol use variables strongly positively correlated with each other and the T. Surprisingly, there was a positive correlation (**push** between Non-alcohol AAT difference scores and last runk and the AUDIT.

