RESEARCH QUESTIONS
Are indicators of risk-propensity (i.e., willingness to take chances with respect to risk of loss), including self-reported personality traits, lab-based behavioural measures of risk, and self-reported attitudes toward risk in various domains, associated with general gambling involvement and problem gambling (PG) behaviour?

PURPOSE
The authors posited that if gambling is a form of risk-taking then various measures of risk-propensity should be correlated with gambling behaviour. The purpose of the present research was to examine the relationship between gambling tendencies and personality traits associated with risk, behavioral measures of risk, and attitudes toward risk.

HYPOTHESIS
Gambling tendencies would be associated with individual differences in non-gambling forms of risk-taking. One factor would account for variability in gambling tendencies and individual differences associated with risk-taking.

PARTICIPANTS
The study had two phases. Phase one participants were 240 undergraduate students (average age = 20 years; 50% males). Phase one participants who scored the highest, lowest, and in the middle of the sex specific distribution of risky personality participated in phase two. Thus, phase two participants were 108 undergraduate students (average age = 20 years; 50% males) comprised of 65 non-problem gamblers, 27 low-risk gamblers, 15 problem gamblers, and 1 pathological gambler.

PROCEDURE
Phase one participants completed personality measures in a group setting. Phase two participants were tested individually at computer stations, and completed measures of risk taking and gambling.

MAIN OUTCOME MEASURES
Zuckerman’s Sensation Seeking Scale (Version 5) assessed sensation seeking, Eysenck’s Impulsivity Scale assessed impulsivity, and the Retrospective Behavioural Self-control Scale assessed self-control across the lifespan. The Domain-Specific Risk Taking Scale assessed self-reported likelihood of engaging in risky behaviours across five content areas (risk-attitudes): financial, health/safety, recreational, ethical, and social. The Choice Task assessed risky choices. The Variance Preference Task and the Balloon Analogue Risk Task also assessed risk taking. Gambling severity was assessed via the Problem Gambling Severity Index, a self-report measure of problem and pathological gambling behaviour over the last 12 months that categorizes an individual’s gambling tendencies into one of four types: non-problem gambling, low-risk gambling, moderate problem gambling, and severe problem (pathological) gambling. Self-report information with respect to total number of different gambling activities engaged in, and monthly frequency of gambling (both over the past year) was also collected.

KEY RESULTS
Impulsivity, sensation-seeking, and low self-control were associated with both PG and general gambling involvement. Behavioural measures of risk were less strongly associated with gambling behavior. PG was associated with risk-accepting attitudes in all domains except recreational and social risk. General gambling involvement was associated with risk-accepting attitudes in all domains except for social risk. Confirmatory factor analyses indicated that both PG and general gambling involvement loaded on single factors with other measures of risk, suggesting that gambling represents one expression of a general propensity for risk-taking. Personality traits associated with risk predicted PG. The only significant individual predictor was low self-control. Behavioral measures of risk did not add to variability explained in PG. Risk-accepting attitudes did add to the variability explained in PG, with attitudes toward gambling as the only predictor. Personality traits associated with
risk predicted general gambling involvement. The only individual predictor was impulsivity. Behavioural measures of risk marginally added to variability explained, above and beyond personality traits associated with risk. The Variance Preference Task was the only individual predictor. Risk accepting attitudes also marginally added to variability explained in general gambling involvement, with no individual predictors. Together, the results provided support for both hypotheses posed.

LIMITATIONS
Shared method variance may have played a role in explaining the findings: in the study, all measures of risk-propensity, with the exception of behavioral measures of risk, were presented in questionnaire form. The sample was comprised of university students, a population that has been shown to exhibit high levels of gambling behaviour. Other individual differences in personality that have been implicated in the production of gambling behaviour (e.g., perfectionism, positive urgency, the Big Five personality traits) were not examined.

CONCLUSIONS
Both general gambling involvement and PG were found to share common variance with various measures of risk-propensity. That finding, in addition to positive correlations found between personality traits associated with risk, risk-attitudes, and gambling, adds to a growing literature suggesting that there are common determinants for gambling and risk-taking. Future research should integrate the measurement of individual differences in general risk-propensity with other established determinants of gambling to shed light on the various causal mechanisms underlying gambling behavior.

KEYWORDS: gambling, risk-taking, problem gambling, attitudes, impulsivity, sensation-seeking, self-control, behavioral measures

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Gambling as a form of risk-taking - Individual differences in personality, risk-accepting attitudes, and behavioral preferences for risk.