

# Differential Prediction of Risk Taking Behaviour in Students: Reversal Theory and the Consideration of Future Consequences

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## Abstract

Risky behaviours such as substance use and academic risk taking often involve both immediate and distant consequences. Past research has focused on the consideration of future consequences (CFC) as an important predictor of risky behaviour. For example, it has been suggested that smokers are more concerned with immediate consequences of their behaviour (Adams, 2012), and that those concerned with future consequences are less likely to procrastinate on academic tasks (Strand, 2011). Despite the dynamic nature of reversal theory (RT) and its suggested usefulness in predicting and explaining risky behaviour, relatively little research exists on the topic. A sample of 202 students completed the Motivational Style Profile, CFC Scale (CFC), Cognitive Appraisal of Risky Events Scale, a demographic profile, and questions about specific substance use. The RT constructs of telic dominance (goal orientation) and negativistic dominance (rebellion) were significantly correlated with both subscales – immediate (CFC-I) and future (CFC-F) – of the CFC. Further, while the CFC-I and the composite CFC score were significant predictors of overall risky behaviour, telic and negativistic dominance better predicted specific risk taking such as drug and alcohol use, as well as risky behaviour in general. The relationship between reversal theory and CFC is discussed, along with their differential utility in predicting risky behaviour.

## Background

### Consideration of Future Consequences

- The consideration of future consequences (CFC) is a time-perspective construct that refers to the extent to which individuals consider and are influenced by the potential implications of their behaviour (Strathman, Gleicher, Boninger, & Edwards, 1994).
- Recently, it has been suggested that there are two factors of the CFC – consideration of immediate (CFC-I) and future (CFC-F) consequences – and that this construct has greater utility when the factors are analysed separately (Joireman, Balliet, Sprott, Spangenberg, & Schultz, 2008).
- Since consideration for future and immediate consequences can coexist to different extents within one person, the CFC can be used to determine which of them is more responsible for a given behaviour.

### Reversal Theory

- Reversal theory (RT) is generally referred to as a theory of motivation, emotion, and personality used to put context to individual behaviour and the necessary inconsistencies of human nature (Apter, 2007).
- Anchored in a set of opposite and mutually exclusive pairs of metamotivational states, or “ways of being” that all people reverse between throughout daily life.
  - Goal / Activity Oriented
  - Self / Other Oriented
  - Conformist / Rebellious
  - Mastery / Sympathy

### Risk Behaviour

- Taking risks is often part of being a university student, but different people engage in different risky behaviours for different reasons.
- The CFC has been implicated in risky behaviours such as smoking (Adams, 2012), procrastination on academic tasks (Strand, 2011), and hazardous drinking (Beenstock, Adams & White, 2010).
- RT has also been studied in relation to risky behaviours such as eating pathology (O'Neil & Lafreniere, 2010), risky sex (Gerkovich, 1998), and smoking (Buris & O'Connell, 2003).

## Methodology

### Participants

- 202 undergraduate students drawn from our Psychology participant pool
  - 84.7% Female
  - 14.4% Male

### Measures completed via an online survey

- Motivational Style Profile (Apter, Mallows & Williams, 1998)
- Consideration of Future Consequences (CFC; Strathman et al., 1994)
- Cognitive Appraisal of Risky Events Scale (CARE; Fromme, Katz & Rivet, 1997)
- Drug Use Questionnaire (O'Neil & Craig, 2012)
- Demographics Questionnaire

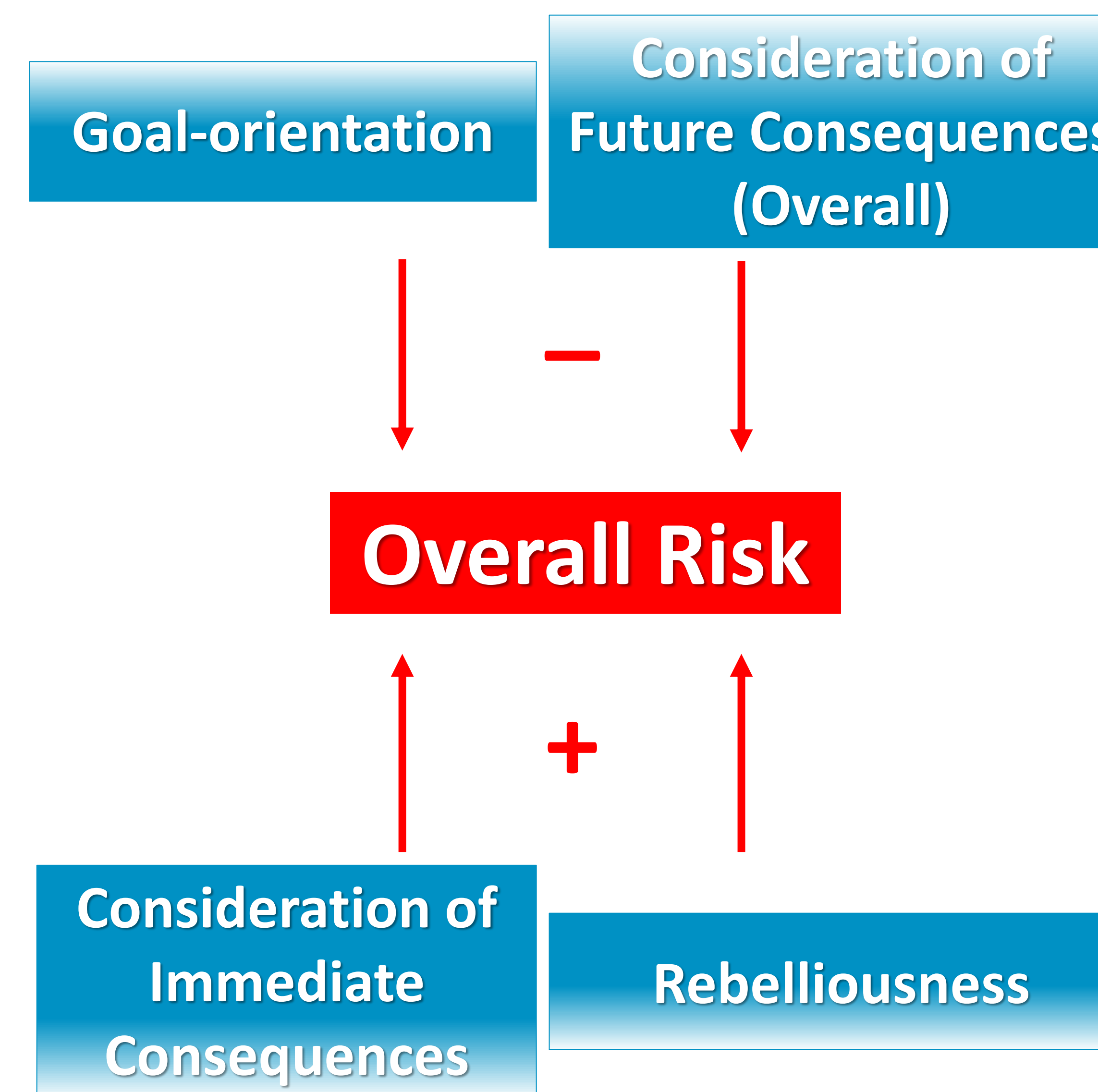
## Results



Overall Risk is defined as an individual's *expected involvement* in risky events such as trying illicit drugs, acting aggressively or illegally, taking sexual risks, drinking heavily, engaging in high-risk sports, and taking academic risks (i.e. skipping class or choosing not to study).

Goal-orientation was the only predictor significantly related to all CARE subscales:

- academic and work risks ( $r = -.285$ \*\*\*)
- drug use ( $r = -.223$ \*\*)
- aggressive/illegal behaviour ( $r = -.183$ \*\*)
- heavy drinking ( $r = -.286$ \*\*\*)
- risky sports behaviour ( $r = -.183$ \*\*)
- sexual risk-taking ( $r = -.163$ \*)



	GO	Reb	CFC	CFC-I	CFC-F	OR
Goal Orientation	--	-.454***	.470***	-.396***	.370***	-.305***
Rebelliousness		--	-.344***	.317***	-.219**	.175*
CFC			--	-.902***	.714***	-.155*
CFC-I				--	-.342***	.168*
CFC-F					--	-.061
Overall Risk						--

\*\*\*  $p < .001$   
\*\*  $p < .01$   
\*  $p < .05$

## Conclusions and Implications

### Risk Behaviour

Individuals with a higher *goal-orientation* were *less likely* to engage in risky behaviours such as heavy drinking, using drugs, engaging in risky sex, acting illegally, participating in high-risk sports, and taking academic risks.

Those with higher levels of *rebelliousness* were *more likely* to use drugs and drink more alcohol, more often.

Students concerned more with the *immediate consequences* of their behaviour reported *greater likelihood* of taking academic risks specifically (i.e. engaging in academic tasks under the influence of alcohol, leaving things until the last minute, and choosing not to study) and engaging in risky behaviour overall.

Students with a high composite CFC score reported being less likely to engage in academic risk-taking, drug use, and risky behaviour overall.

### Reversal Theory and Consideration of Future Consequences

RT and CFC both predicted risk taking, and were found to be significantly related to each other.

Students with *high activity orientation* (low goal orientation) and *high levels of rebelliousness* were found to be more concerned with *immediate consequences* of their behaviour, rather than the more distal outcomes. This makes sense, intuitively, because those who are activity-oriented are more playful and enjoy 'living in the moment', with present behavioural outcomes becoming more salient.

The present research supports the recommendation to analyse *both CFC subscales* rather than the composite score only.

- All scales had acceptable reliabilities, with the CFC-F being the lowest ( $\alpha = .710$ ) compared to the CFC-I and composite CFC ( $\alpha = .825$  and  $\alpha = .814$ , respectively).
- The CFC-I was able to predict students' potential risk taking, while the CFC-F showed no significant relationships with any of the dependent variables.

Both theories can be used in the risk-behaviour research, and we suggest using both theories together, to gain a better understanding of the motivational and time-perspective factors leading to risk-taking.