

# Conscientiousness as a mediator of the sex-environmentalism relationship

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## Introduction

- There is a robust sex difference in environmental attitudes and behaviour, such that women > pro-environmental than men (Gifford & Nulssen, 2014)
- Extant hypotheses for the sex differences in environmental concern, attitudes, and behaviour have been examined with limited success.
- Conscientiousness involves organization, goal-oriented behaviour, and an awareness of the impact of one's own behaviour on others (McCrae & Costa, 1987),
- Conscientious men and women exhibit more concern for the environment (Brick & Lewis, 2014; Hirsh, 2010; Markowitz, Goldberg, Ashton & Lee, 2013; Milfont & Sibley, 2012).
- Interestingly, women are typically found to be more conscientious than men (Lehman, et al. 2013), highlighting conscientiousness as a potentially important mediator of the gender-environmentalism relationship.

## Hypotheses

- Hypothesis 1: Conscientiousness will mediate the relationship between biological sex and environmental protectionism attitudes
- Hypothesis 2: Conscientiousness will mediate the relationship between biological sex and environmental protectionism utilization attitudes
- Hypothesis 3: Conscientiousness will mediate the relationship between biological sex and self-report environmental behaviour

## Method

**Participants.** Study 1: 436 students (Female=245) Age M=20.49 (SD=4.31) Study 2: 321 community members (Females=178) Age M=35.3 (SD=10.64)

**Sex.** Self-report biological sex (male/female).

**Personality.** Study 1: Ten-Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) Study 2: Big Five Inventory (BFI; John & Srivastava, 1999). Both measure Openness, Agreeableness, Conscientiousness, Neuroticism (Emotional Stability), and Extraversion using a 7-point Likert-type scale ranging from 1 = *Disagree strongly* to 7 = *Agree strongly*.

**Environmental Behaviour.** The Schultz Environmental Behaviour scale (2005) was used to analyze environmental behaviour. The scale consists of 12 items on a 5-point scale (1=Never, 5=often) with an "not applicable" option is the participant had had no opportunity to take action.

## Method (continued)

**Environmental Attitude.** The Environmental Attitudes Inventory (2009) was used to analyze EA. It consists of 12 subscales: enjoyment of nature, support for interventionist conservation policies, environmental movement activism, conservation motivated by anthropocentric concern, confidence in science and technology, environmental fragility, altering nature, personal conservation behaviour, human dominance over nature, human utilization of nature, ecocentric concern, and support for population growth policies. The inventory for this study consists of 24 items, two items per scale. The response option was on a 7-point Likert scale (1=Strongly Disagree, 7=Strongly Agree).

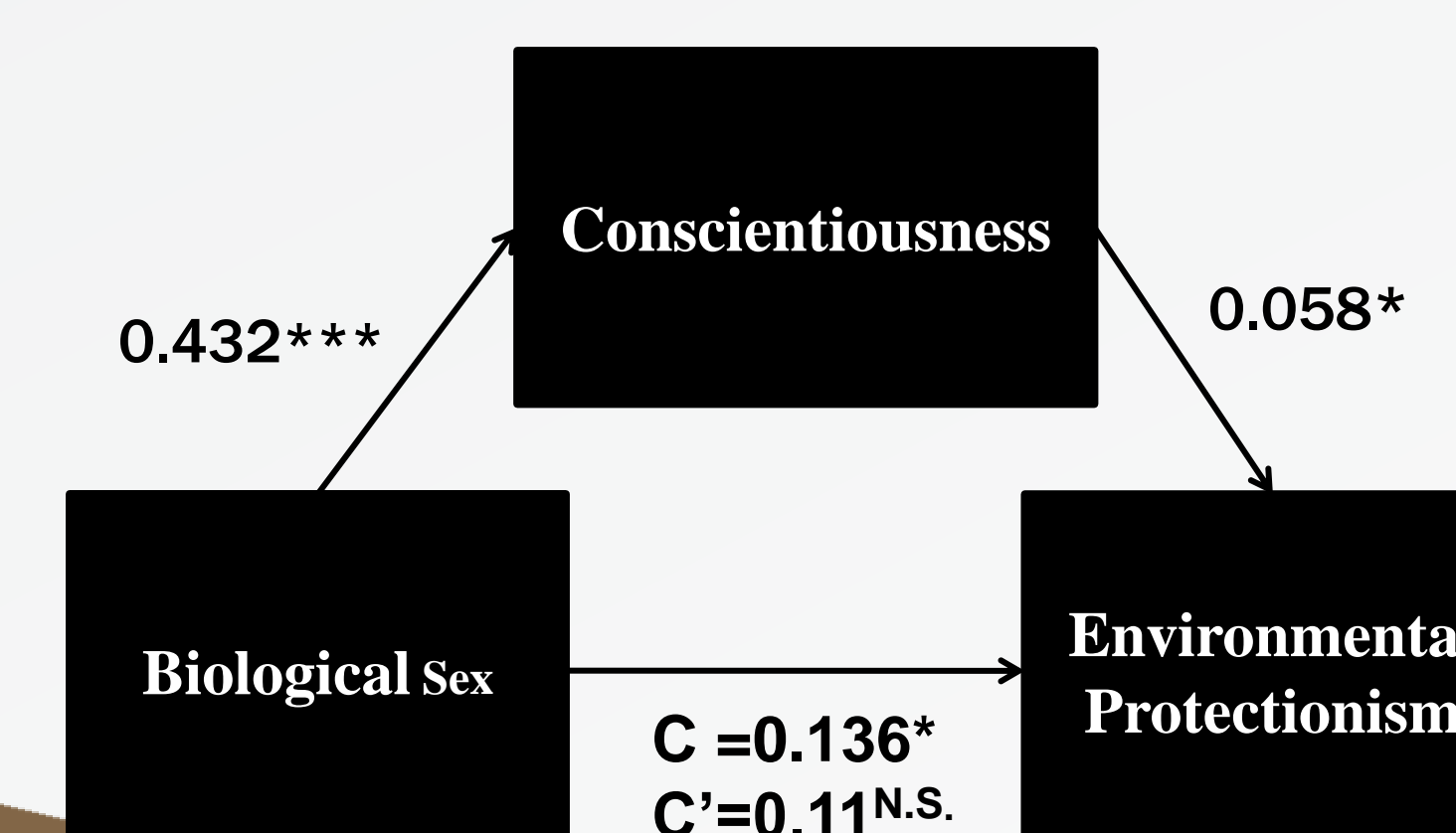
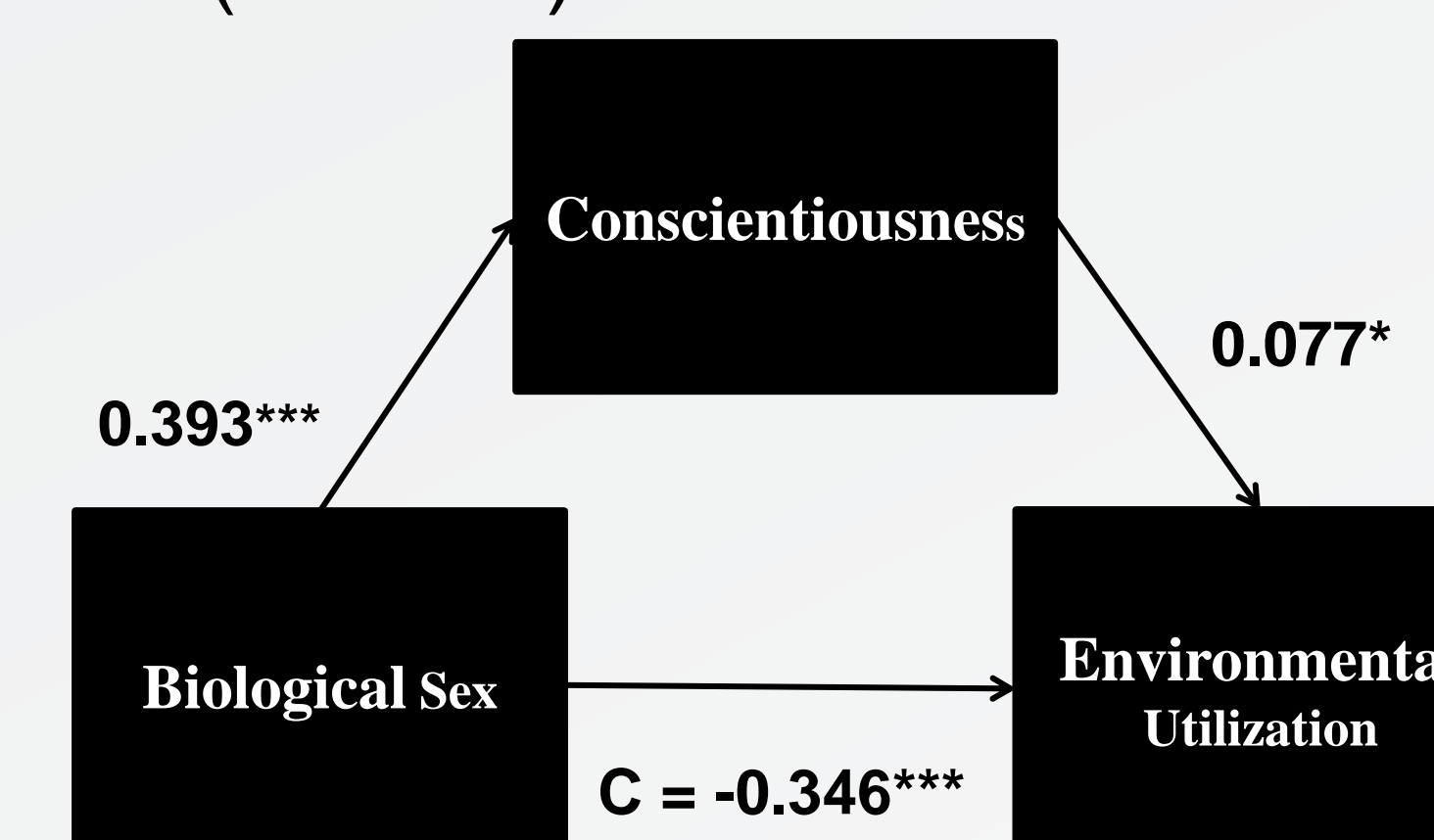
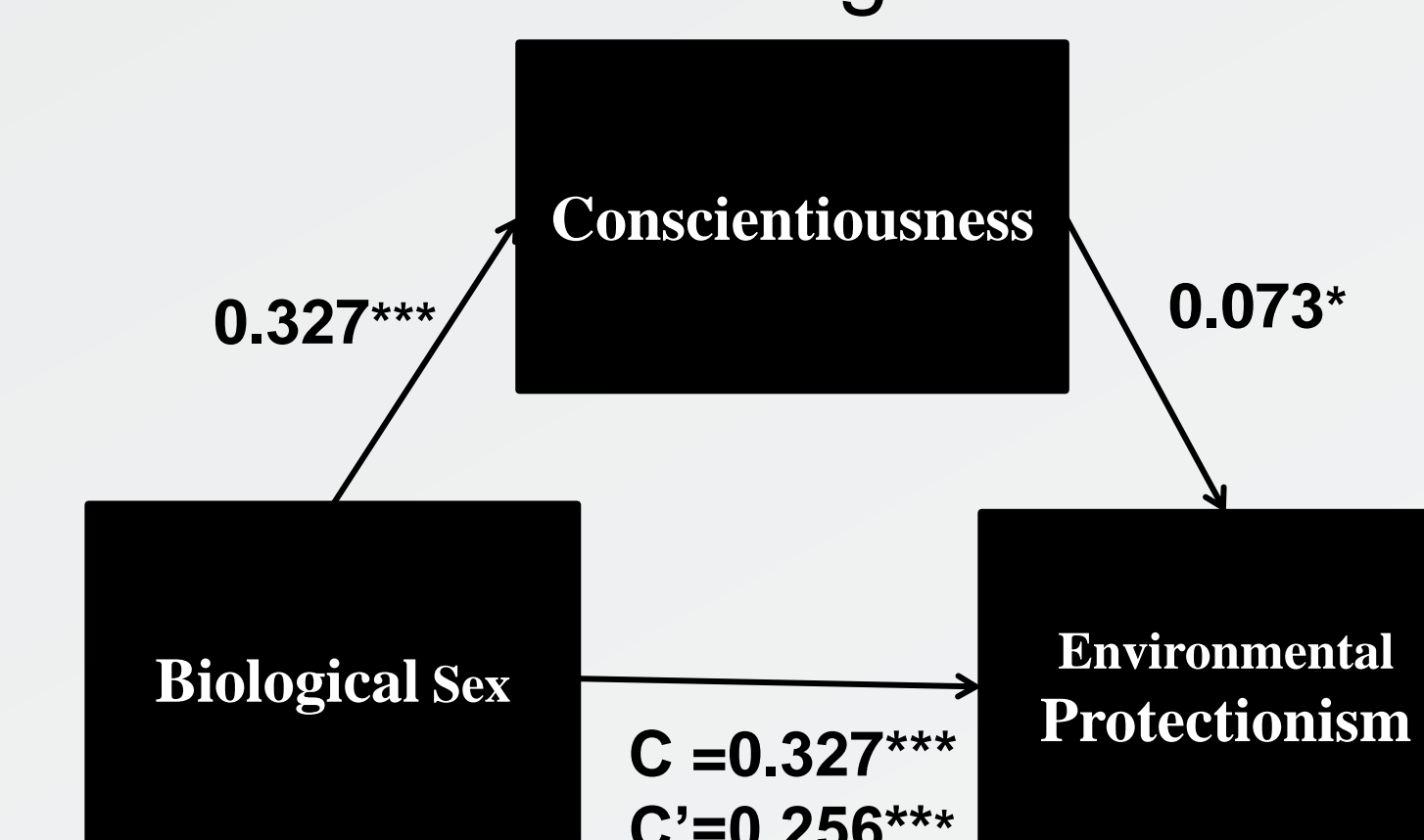
## Results

### Study 1

Measure	1	2	3	4	5	6	7	8
1. Sex	-----							
2. Protectionism	.182**	-----						
3. Utilization	-.205**	-.599**	-----					
4. Environmental Behaviour	.099*	.521**	-.369**	-----				
5. Extraversion	.012	.027	-.021	.058	-----			
6. Agreeableness	.159**	.063	-.088	.027	-.120*	-----		
7. Conscientiousness	.170**	.147**	-.148**	.121*	.057	.102*	-----	
8. Neuroticism	-.230**	.046	-.082	.094*	.137**	.116*	.241**	-----
9. Openness	.018	.236**	-.225**	.193**	.348**	.039	.208**	.180**

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

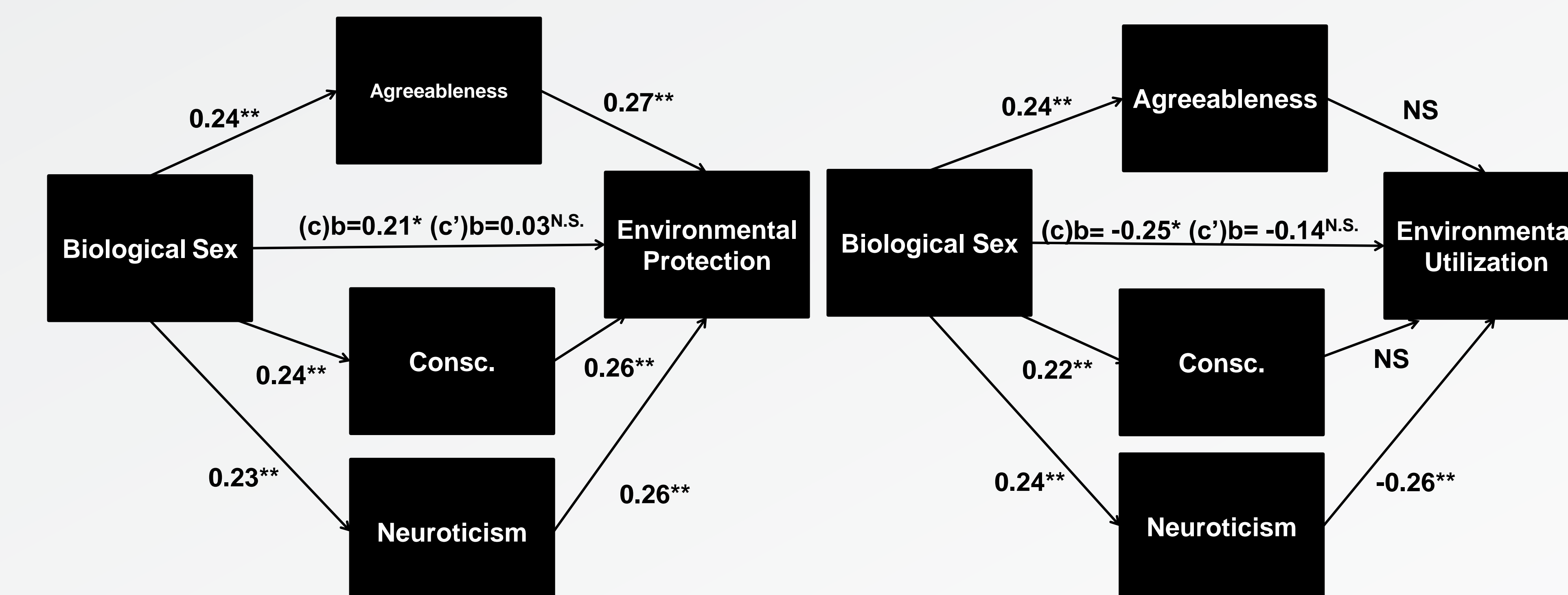


### Study 2

Measure	1	2	3	4	5	6	7	8
1. Sex	-----							
2. Protectionism	.107*	-----						
3. Utilization	-.127*	-.676**	-----					
4. Enviro. Behav.	-.104	.286**	-.197**	-----				
5. Extraversion	-.021	.017	.021	.185**	-----			
6. Agreeableness	.161**	.229**	-.072	-.029	.199**	-----		
7. Consc.	.143**	.220**	-.039	.029	.160**	.517**	-----	
8. Neuroticism	.158**	.001	-.108*	-.046	-.403**	-.445**	-.502**	-----
9. Openness	-.038	.428**	-.316**	.237**	.252**	.178**	.251**	-.072

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).



## Discussion

This research is important to help us understand the sex difference in environmentalism. Without the knowledge, we can not fully modify the message of environmentalism to promote it to each sex separately.

## Funding



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