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AL-HAMDANI, M., JOYCE, K., COWIE, M., SMITH, S., & STEWART, S. H. (2019). TOO LITTLE, TOO MUCH OR JUST RIGHT: INJURY/ILLNESS SENSITIVITY AND INTENTIONS TO DRINK AS A BASIS FOR ALCOHOL CONSUMER SEGMENTATION. *SUBSTANCE USE & MISUSE*, 1-5.

Disclosure Statement

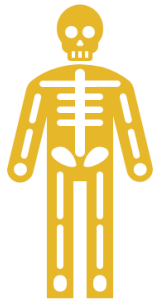
- I have no affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization in **relation to my addictions research.**

- I have received funding the pharmaceutical industry for Lung health programs in my work with the Lung Association of Nova Scotia.

Alcohol consumer segmentation

Past segmentation research

Attitudes, demographics, and knowledge



Attitudes

Following attitude measurement

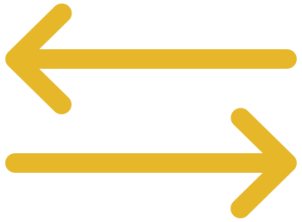
- Ordinaries, Socials, etc.
- Mathijssen, Janssen, van Bon-Martens, & van de Goor, 2012

Alcohol consumer segmentation

Demographics

Using audience segmentation databases

- Cyber Millennials etc
- Moss, Kirby, & Donodeo, 2009



Knowledge

After an assessment of social marketing

- Risky Males, Good Females etc
- Dietrich, Rundle-Thiele, Leo, & Connor, 2015

What we know

Illness/ Injury sensitivity

Protective

Negative affect

Higher NA instills fear = reduces intentions

Intentions

Predict drinking behaviour

What we don't know

- Can we differentiate alcohol consumers based on illness/injury sensitivity and intentions to reduce drinking?

- If we can, will we find differences in:
  - Negative affect
  - Alcohol consumption

Methods

- Procedure
  - 486 alcohol consumers/ ex-drinkers
  - Filled out illness/injury sensitivity scale, negative affect scale, demographic questionnaires, and questions about alcohol consumption
- Scales
  - Illness (α=.88) illness (α=.89); clear 2 factor solution (Carleton, Park, & Asmundson, 2006)
  - Intention (α=.88) (Al-Hamdani & Smith, 2016)
  - Negative affect (α=.96) (Wigg & Stafford, 2016)

Methods cont'd

Type of analysis

K-means analysis

ANOVA and Chi-square tests

Cluster solutions

3, 4, and 5

Cluster solution comparison

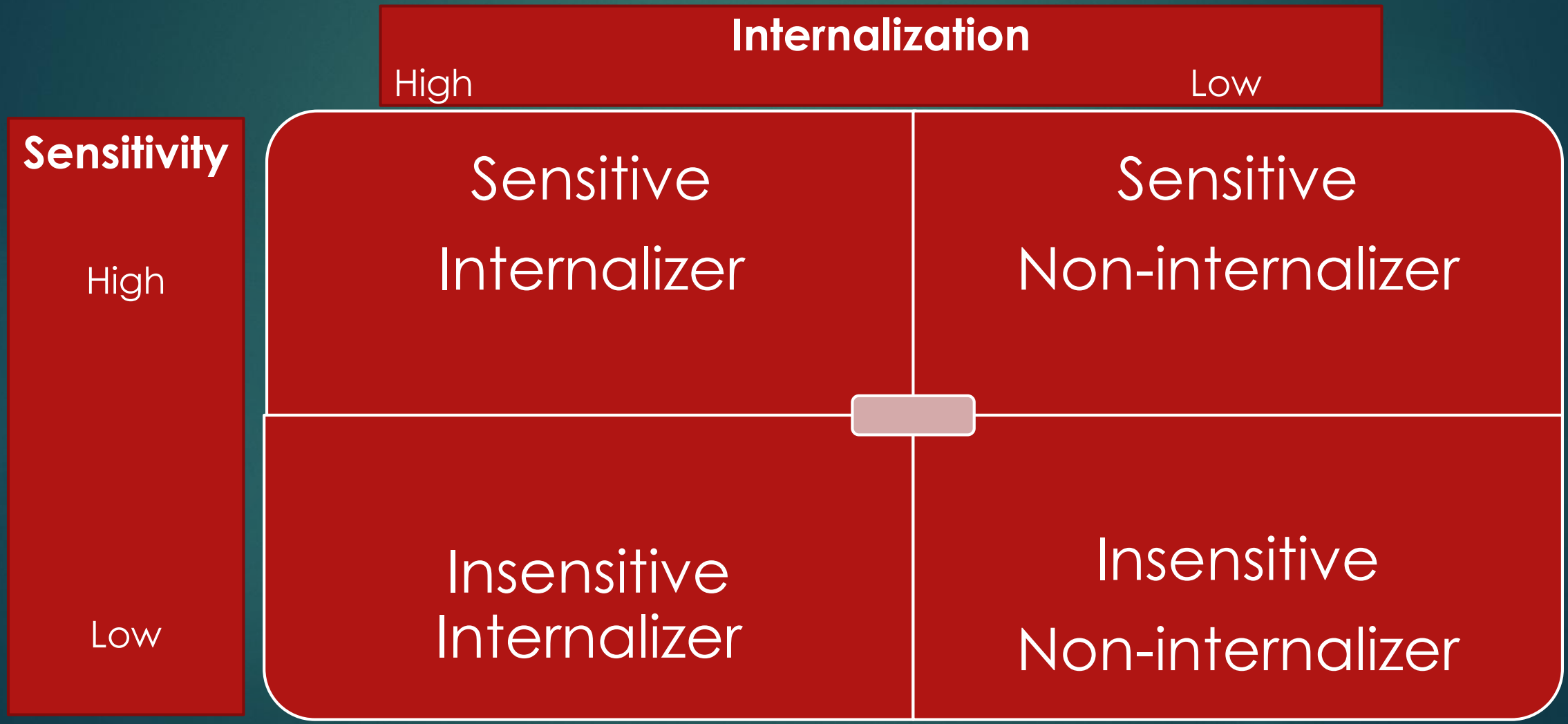
Solution	Variable		
	Injury Sensitivity	Illness Sensitivity	Intention
	Main effect *F*		
3-cluster solution	286.66*	377.27*	193.42*
	Mean score by cluster and variable		
1st cluster	3.19	3.24	3.22
2nd cluster	1.63	1.77	1.67
3rd cluster	3.07	3.45	1.45
	Main effect *F*		
4-cluster solution	241.44*	289.66*	349.41*
	Mean score by cluster and variable		
1st cluster	1.81	1.98	2.62
2nd cluster	2.96	3.23	1.36
3rd cluster	1.56	1.70	1.20
4th cluster	3.56	3.75	3.00
	Main effect *F*		
5-cluster solution	321.00*	256.94*	179.88*
	Mean score by cluster and variable		
1st cluster	2.11	2.40	2.88
2nd cluster	3.38	3.73	1.51
3rd cluster	1.23	1.45	1.63
4th cluster	3.79	3.67	3.26
5th cluster	2.15	2.23	1.29

Note. Main effect *F* is derived from an Analysis of Variance. *$p < .001$.

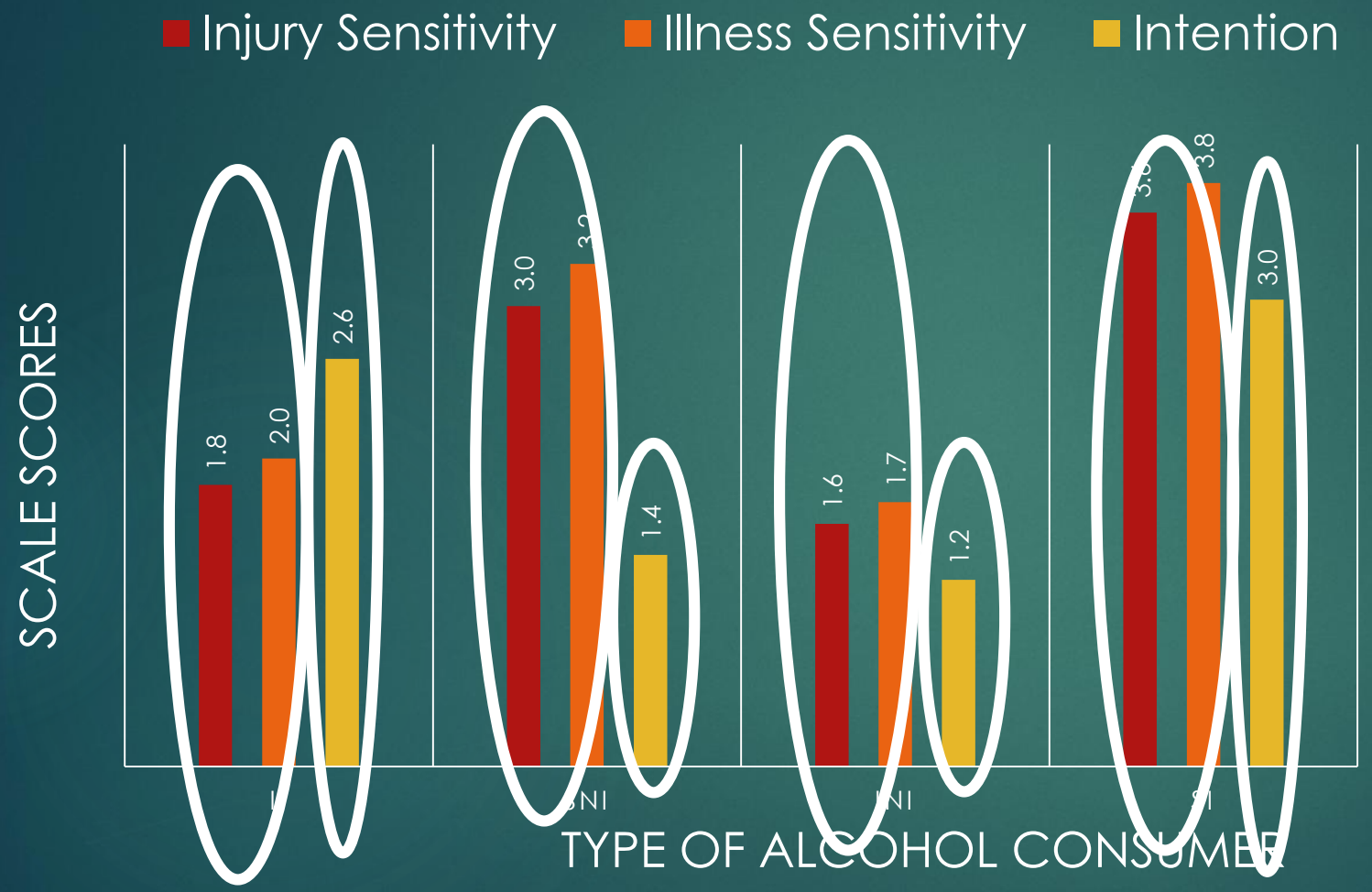
Labeling the 4 clusters

- The groups were labelled based on
  - Sensitivity (levels of illness/injury sensitivity)
  - “internalization” (internalizing sensitivity through increased intentions to reduce consumption)

2 x 2 matrix


Internalization
High
Low
Sensitivity
High
Low
Sensitive Internalizer
Sensitive Non-internalizer
Insensitive Internalizer
Insensitive Non-internalizer

Mean scores for the final cluster solution



Note.

II = Insensitive Internalizer

SNI = Sensitive Non-Internalizer

INI = Insensitive Non-Internalizer

SI = Sensitive Internalizer

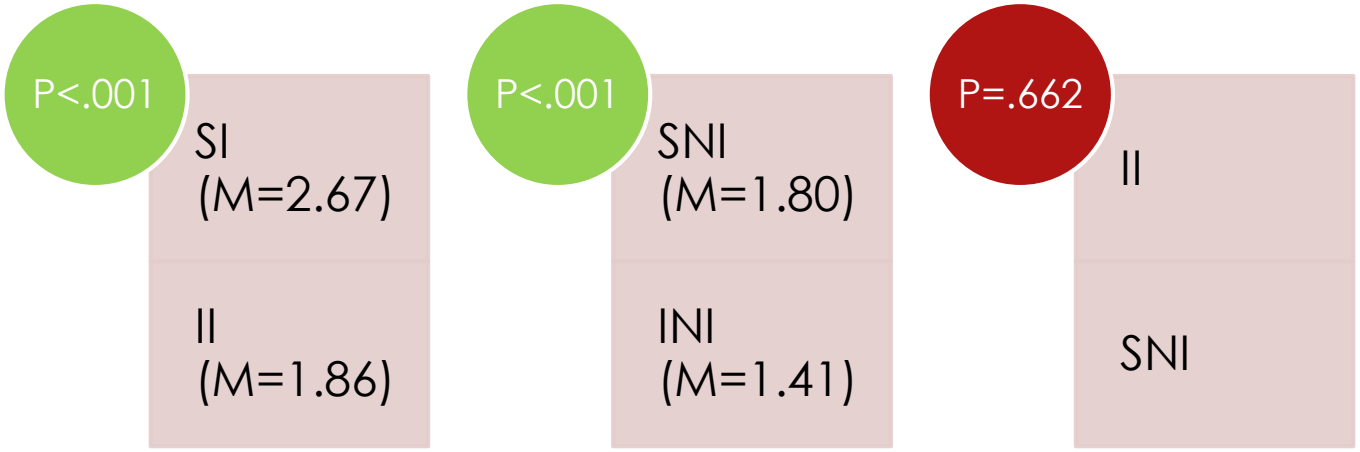
Al-Hamdani, M., Joyce, K., Cowie, M., Smith, S., & Stewart, S. H. (2019). Too little, too much or just right: Injury/illness sensitivity and intentions to drink as a basis for alcohol consumer segmentation. *Substance use & misuse*, 1-5.

Cluster Profile by Type of Consumer

Variable	INI	II	SNI	SI	Total	*p*
Sex						
Male	104	78	45	37	264	.053[b]
Female	77	50	60	29	216	
Prefer not to say	2	2	0	2	6	
Education						
High school	39	25	25	13	102	.986[a]
Diploma	36	23	24	13	96	
Undergraduate	71	50	35	26	182	
Graduate	33	29	20	14	96	
Other	4	3	1	2	10	
Ethnicity						
Caucasian	155	107	90	53	405	.220[b]
African/Caribbean	1	1	1	0	3	
Middle Eastern	0	0	0	2	2	
South Asian	3	3	0	3	9	
East Asian/Pacific Islander	21	17	11	10	59	
Other	3	2	3	0	8	
Country of residence						
United States	127	94	73	45	339	.074[a]
Canada	15	16	7	13	51	
Other	41	20	25	10	96	
Favourite alcoholic drink						
Beer	73	61	51	26	211	.378[a]
Wine	40	18	14	14	86	
Hard liquor	70	51	40	28	189	
Alcohol consumption status						
Heavy	27 (15)	23 (18)	13 (12)	7 (10)	70	.044[a]*
Moderate	49 (27)	25 (19)	22 (21)	9 (13)	105	
Light	87 (47)	64 (49)	50 (48)	33 (49)	234	
Occasional	20 (11)	17 (13)	18 (17)	16 (24)	71	
Ex-drinker	0 (0)	1 (0)	2 (1)	3 (4)	6	
Total	183	130	105	68	486	

Note. II = Insensitive Internalizer; SNI = Sensitive Non-Internalizer; INI = Insensitive Non-Internalizer; SI = Sensitive Internalizer. Pearson chi-square was used when the count was under 5 for 20% or less of the cells. Likelihood ratio was used when the count was over 5 for 20% or more of the cells. [a] = Pearson chi-square; [b] = Likelihood ratio. *$p < .05$, two-tailed test. Parenthesis used to indicate percentages for variables with significant effects.

Negative affect scores by group



Note. II = Insensitive Internalizer; SNI = Sensitive Non-Internalizer; INI = Insensitive Non-Internalizer; SI = Sensitive Internalizer.

In a nutshell

SI	
SNI II	
INI	

Discussion

- Prior studies
  - high illness/injury sensitivity
  - increases fear and health protective behaviours

- Our findings
  - 4 clusters
  - Negative affect : SI = highest & INI = lowest.
  - SI were more likely = occasional and ex-drinkers
  - INI were more likely = moderate drinkers
  - Co-occurrence of high illness/injury sensitivity and intentions to reduce drinking = protective

Limitations

Convenience sample

Cross sectional design

Causes of sensitivity internalization

Cluster prediction of actual behaviour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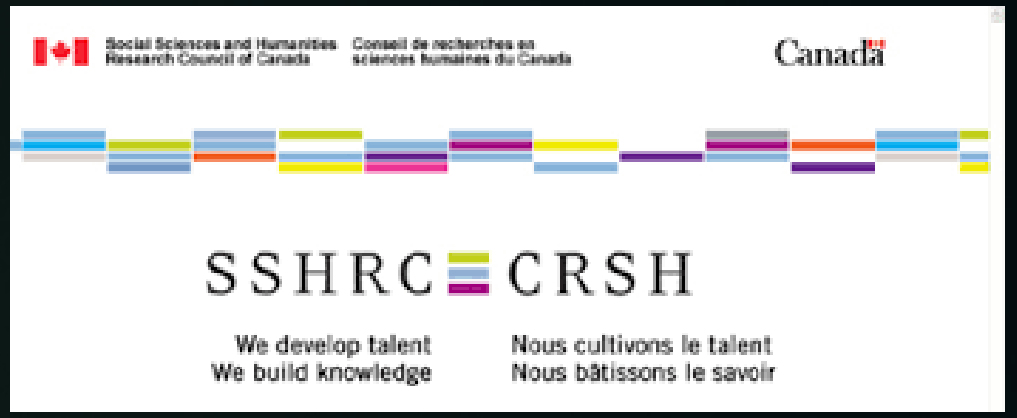
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