

Supplementary file 1

1) Stages of change measure

Stage of change	Wearing helmet (Do you consistently wear a helmet when you ride a motorcycle?)
Precontemplation	No, and I do not intend to wear in the next 6 months
Contemplation	No, but I intend to wear in the next 6 months
Preparation	No, but I intend to wear in the next 30 days
Action	Yes, I have been wearing for less than 6 months
Maintenance	Yes, I have been wearing for more than 6 months

2) Decisional Balance measure

Decision Balance (Pros and Cons)	Wearing helmet Very unimportant = 1 to Very important = 5
Pros 1	Wearing a helmet is a good choice
Pros 2	Smart riders wear helmets
Pros 3	Helmets decrease head injuries
Pros 4	Helmet protects me on roads shared with cars
Pros 5	I feel safer when I wear a helmet while riding a motorcycle
Cons 1	People tease others who wear helmets
Cons 2	Wearing a helmet makes it less fun to ride a motorcycle
Cons 3	Wearing a helmet is uncomfortable
Cons 4	Wearing a helmet will mess up my hair
Cons 5	Helmet cost more than I am willing to pay

3) Self-efficacy (Confidence and Temptation) measure

Confidence to wear a helmet 1-5	Situation Not at all = 1 to Extremely (confidence or temptation to wear a helmet) = 5	Temptation not to wear a helmet
	<p>Positive Affect Situations When I am feeling really good. When things are going really well for me. When I feel like having a good time. When I am really happy.</p>	
	<p>Negative Affect Situations When I am feeling angry or depressed. When I am worried about something. When I am stressed. When I am nervous.</p>	
	<p>Habit Situations When I think my helmet use behaviors are not a problem. When I have a strong urge not to wear a helmet. When I think it is okay not to wear a helmet just one time. When I am in a situation that I have not worn a helmet in the past. When I realize that I have been wearing a helmet a lot lately. When I am in a situation that I have worn a helmet in the past. When I become overconfident about my bicycle riding abilities.</p>	
	<p>Environmental Cues (Context) When my helmet is easy to access. When I only have to ride a short distance. When the weather is clear with no precipitation. When the weather is rainy or snowy. When I am exposed to information about helmet use or brain injury prevention. When I am recreational biking with friends. When I am commuting to work and/or to school. When I am in a rush. When the helmet will mess up my hair.</p>	
	<p>Social Cues (Social Situations) When other people encourage me not to wear a helmet.</p>	

	<p>When I am with friends who are not wearing a helmet.</p> <p>When I see others wearing a helmet.</p> <p>When other people encourage me to wear a helmet.</p> <p>When I am with friends who are wearing a helmet.</p> <p>When I see others not wearing a helmet.</p>	
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4) Processes of Change measure (cognitive and behavioral)

process of change	<p>Wearing helmet</p> <p>1 = Never to 5 = Repeatedly</p>
<p>Consciousness Raising</p> <p>(cognitive)</p>	<p>Information from the media (online sources, magazines, newspaper, TV) about motorcycle helmet use seems to catch my eye.</p> <p>I recall the information that people have given me on the benefits of wearing a motorcycle helmet.</p> <p>I have heard that using a motorcycle helmet can reduce the risk of brain injury.</p>
<p>Dramatic Relief</p> <p>(cognitive)</p>	<p>I react emotionally to warnings about the health hazards of not wearing a motorcycle helmet.</p> <p>I get upset when I see people who can benefit from wearing a motorcycle helmet but do not wearing a helmet.</p> <p>I am afraid of the consequences to my health if I do not wear a motorcycle helmet.</p>
<p>Environmental Reevaluation</p> <p>(cognitive)</p>	<p>I consider the view that my motorcycle helmet use behaviors serve as a model to others.</p> <p>I think that regular motorcycle helmet use plays a role in reducing health care costs by decreasing the risk of brain injury.</p> <p>I think about the impact I may have on the people around me if I sustain a brain injury while riding a motorcycle because I was not wearing a helmet.</p>
<p>Self-Reevaluation</p> <p>(cognitive)</p>	<p>I feel ashamed or disappointed when I do not wear a motorcycle helmet.</p> <p>I feel better about myself when I wear a motorcycle helmet.</p> <p>I believe that regular motorcycle helmet use will make me a healthier person.</p>
<p>Social Liberation</p> <p>(cognitive)</p>	<p>I see that society is changing in ways that make it easier to wear a motorcycle helmet.</p> <p>I have found that many people know that wearing a motorcycle helmet is suitable for them.</p> <p>I am aware of more people who are regularly wearing a motorcycle helmet.</p>
<p>Counter-conditioning</p> <p>(behavioral)</p>	<p>Instead of wearing a hat or nothing on my head when I ride a motorcycle, I wear a helmet.</p> <p>Even if I cannot easily find my motorcycle helmet, I try to find it anyway before I ride because I know I will feel safer with a helmet.</p> <p>When I am tempted not to wear a motorcycle helmet, I try to remind myself the benefits of wearing a helmet.</p>
<p>Helping Relationships</p>	<p>I am rewarded by others if I wear a motorcycle helmet.</p> <p>I have friends who encourage me to wear a motorcycle helmet, even if I do not feel like it.</p>

(behavioral)	I have someone who tries to share his personal experiences of helmet use with me.
Self-Liberation (behavioral)	I make commitments to myself to wear a motorcycle helmet. I believe that I can wear a motorcycle helmet regularly. I tell myself that if I try hard enough, I can regularly wear a motorcycle helmet when I ride a motorcycle.
Stimulus Control (behavioral)	I keep a helmet in motorcycle to remind me to wear a helmet. I make sure that I always have access to a motorcycle helmet when I plan to ride a motorcycle. I avoid situations in which I have to ride a motorcycle without a helmet.
Reinforcement Management (behavioral)	I reward myself when I wear a motorcycle helmet. If I engage in regular helmet use, I find that I feel safer. Someone in my life makes me feel good when I wear a motorcycle helmet.