

Do Lifestyle and Hormonal Variables Attenuate Links Between Health and Facial Attractiveness?

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Introduction

Facial attractiveness has been considered a cue to immunocompetence, with studies yielding mixed findings. Jones and colleagues (2021) suggested that these discrepant findings could be due to the common influence of lifestyle factors upon both facial attractiveness and health. Here, we examined the links between testosterone (T), cortisol (C), skin fold, self-reports of poor health, and health-linked lifestyle factors (sleep, smoking, second-hand smoke, drinking alcohol, family stress, and exercising) as predictors of facial attractiveness in 162 young men.

Method

Participants were 162 young adult men, 18-39 years ($M_{age} = 22.7$, $SD = 4.7$; 90% Caucasian). Participants received either \$50 CAD remuneration or partial course credit and \$10. Front-facing facial photos were rated on attractiveness by eight undergraduate women ($\alpha = 0.82$). Saliva samples were assayed for T and C. Participants completed the Health Symptoms Survey (Knack, et al., 2011, 2012) ($\alpha = 0.93$), and a 7-item composite measure of unhealthy lifestyle factors: alcohol consumption, smoking/tobacco exposure, life stress, exercise, and sleep ($\alpha = .84$). A second indicator of unhealthy lifestyle was individuals' skin fold measurement obtained using a digital body fat caliper.

Results

Following bivariate (Table Left) and linear regression (Table Right) analyses, lifestyle factors were considered as having an indirect effect on facial attractiveness specifically via increased skinfold and associated poor health. The indirect effect for the sequential mediation pathway was statistically significant ($B = -.01$, $BootSE = .009$, $LLCI = -.04$, $ULCI = -.001$) suggesting a sequentially mediated influence of lifestyle upon facial attractiveness via skin fold and symptoms of poor health.

	1	2	3	4	5	6	7
1. Female-rated Attractiveness	-----						
2. Lifestyle Habits	-.15†	-----					
3. Average Skinfold (mm)	-.28***	.20**	-----				
4. Log Testosterone	.10	.02	-.03	-----			
5. Log Cortisol	.04	.25**	-.08	.33***	-----		
6. Log T x Log C	.02	.25**	-.07	.41***	.98***	-----	
7. Poor Health Symptoms	-.28***	.27***	.34***	-.01	.10	.11	-----
8. Log slgA	.14†	-.07	-.01	-.02	.12	.11	-.14†

	B	Std. Error	β	t	p	$R^2_{adjusted}$
DV: Facial Attractiveness						.12
Lifestyle Habits	-.06	0.11	-.05	-0.60	.54	
Average skinfold (mm)	-.03	0.01	-.21	-2.54	.01**	
Poor Health Symptoms	-.89	0.43	-.17	-2.04	.04*	
Log slgA	.41	0.27	.12	1.52	.13	
Log Testosterone	.98	0.53	.17	1.81	.06†	
Log Cortisol	2.25	1.35	.69	1.66	.10	
Log T x Log C	-1.14	0.69	-.72	-1.66	.10	

