CAN SOCIAL INTERACTION AND THE EXPERIENCE OF FLOW PREDICT COMMITMENT TO PHYSICAL ACTIVITY?

Anette Jenkins, supervised by Dr Kate Wilmut

OXFORD BROOKES UNIVERSITY

BACKGROUND

- Physical activity (PA) has both immediate and long-term benefits on physical and mental health
- BUT promoting active behaviour by listing the benefits alone doesn't lead to an increased involvement.
- Programmes trying to increase PA tend to focus on external factors (providing facilities) and on behavioural changes.
- Flow: complete immersion in an activity without reflective self-consciousness but with a deep sense of control (Pfeifer & Engeser, 2021, p. 2).
- Flow traits: challenge-skill balance, merging of action and awareness, clear goals, unambiguous feedback, concentration on the task, sense of control, loss of self-consciousness, time transformation and an autotelic (intrinsically) rewarding experience..
- Flow has been shown to enhance performance and commitment in elite athletes
- Not much can be found on consequences of flow in recreational physical activity.

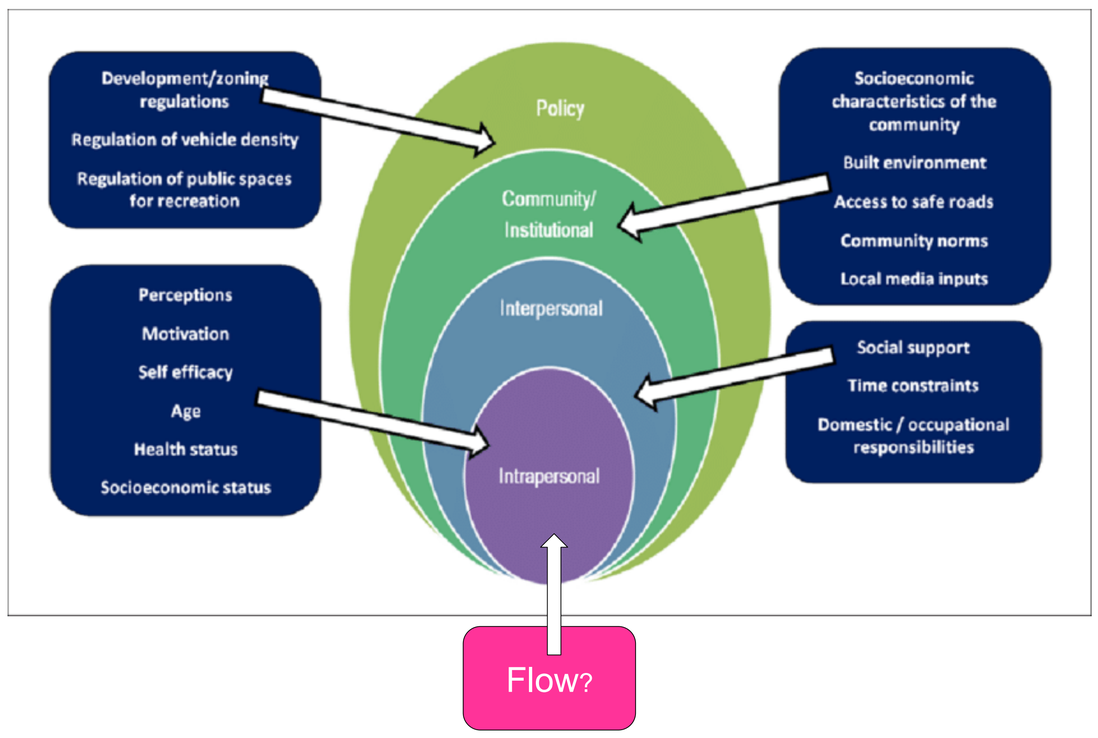
BENEFITS OF PHYSICAL ACTIVITY

AIM & HYPOTHESIS

Aim: To identify intrapersonal / interpersonal motivations for PA by reviewing the impact and consequences of social interaction and experience of flow in recreational sport.
Hypothesis: Social Interaction and the Autotelic nature of flow will be strong predictors of commitment to PA. It is also expected to find correlations between some of the other flow traits and commitment to PA.
Impact: could possibly affect the way commitment to PA is established in the future.

FACTORS INFLUENCING PHYSICAL ACTIVITY

Factors that influence participation in physical activity with reference to the social-ecological model (SEM) proposed by McLeroy et al. (1988). Can Flow be another factor?



METHOD

The study aims to recruit 100 - 150 participants using various social media sites and the Psychology Department student research account and email group. Participants must be over 18 years of age, physically active and have good English speaking skills. They will complete a 5 point Likert-type questionnaire which includes measures of Social Interaction, the nine Flow Traits and Commitment to Physical Activity.

Questionnaire:

- To established if a state of flow has been experienced, participants will be asked to read three quotations, devised by Csikszentmihaly (1975) and confirm that they had a similar experience.
- *Social Interaction* is tested with Likert-type questions on social support, interaction and engagement.
- The *nine individual flow states* are tested in the Activity Flow State scale (AFSS) by Payne et al. (2011). It contains 34 statements representing the nine dimensions of flow.
- *Commitment to Physical Activity* is tested in the Sport Commitment Questionnaire- 2 which has 13 subscales and is designed to work with athletes, This will be adapted to be used in research on recreational participation. Questions, which assess rewarding experiences through participation in competitions have been replaced by rewarding feelings of satisfaction as suggested by Wilson et al. (2004 as cited in Williams, 2012).

DATA ANALYSIS

The data will be quantitavely analysed using Jamovi

- Correlation analysis and Multiple linear regression analysis to establish significant correlations and relationships between the variables of Social Interaction and Flow traits with Commitment to Physical Activity.
- Scatterplots, Q-Q plots and applicable tables will be used to display results on
  - Demographics (age & gender),
  - Correlations between social interaction and commitment to physical activity and the individual flow traits and commitment to physical activity,
  - Multiple linear regression analysis to establish if social interaction and individual flow traits predict commitment to physical activity.

PRELIMINARY RESULTS

Correlation Matrix

Correlation Matrix

		SI Average (2)	F MAA	F CG	F CO	F UF	F CS	F TT	F CN	F SC	F AE	Commitment Average
SI Average (2)	Spearman's rho	—										
	df	—										
	p-value	—										
F MAA	Spearman's rho	0.08	—									
	df	15	—									
	p-value	0.754	—									
F CG	Spearman's rho	0.07	0.16	—								
	df	15	15	—								
	p-value	0.804	0.539	—								
F CO	Spearman's rho	−0.08	0.02	0.48	—							
	df	15	15	15	—							
	p-value	0.787	0.936	0.082	—							
F UF	Spearman's rho	0.50 *	0.16	0.48 *	0.51 *	—						
	df	15	15	15	15	—						
	p-value	0.041	0.635	0.049	0.038	—						
F CS	Spearman's rho	0.53 *	−0.09	0.38	0.33	0.53 *	—					
	df	15	15	15	15	15	—					
	p-value	0.026	0.734	0.150	0.200	0.030	—					
F TT	Spearman's rho	0.47	0.16	0.38	−0.14	0.39	0.37	—				
	df	15	15	15	15	15	15	—				
	p-value	0.057	0.545	0.150	0.588	0.120	0.140	—				
F CN	Spearman's rho	0.24	0.70 **	0.40	0.40	0.42	0.38	0.40	—			
	df	15	15	15	15	15	15	15	—			
	p-value	0.384	0.002	0.107	0.110	0.093	0.155	0.114	—			
F SC	Spearman's rho	−0.06	0.10	0.32	0.24	0.06	−0.19	0.11	0.02	—		
	df	15	15	15	15	15	15	15	15	—		
	p-value	0.804	0.701	0.216	0.346	0.816	0.454	0.684	0.933	—		
F AE	Spearman's rho	0.17	0.19	−0.10	−0.11	−0.15	0.17	0.23	0.43	0.14	—	
	df	15	15	15	15	15	15	15	15	15	—	
	p-value	0.512	0.465	0.708	0.684	0.559	0.526	0.364	0.087	0.581	—	
Commitment Average	Spearman's rho	0.00	0.25	−0.04	0.11	−0.02	0.29	0.34	0.40	−0.24	0.21	—
	df	15	15	15	15	15	15	15	15	15	15	—
	p-value	0.994	0.327	0.877	0.662	0.948	0.257	0.176	0.113	0.364	0.428	—

Note. * p < .05, ** p < .01, *** p < .001

Correlation Analysis shows no correlation between Commitment to Physical Activity and any of the independent variables, but some of the flow traits correlate to each other. Spearman's rho was calculated and the strongest correlation can be found between Sense of Control (CN) and Merging of Action and Awareness (MAA) ($r(15) = .70$; $p = .002$).

DISCUSSION

Preliminary Results are based on a very small sample size with a fairly large number of variables and can therefore be misleading. A qualitative analysis might add information that can not be obtained in quantitave research.

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