The background features silhouettes of several runners in motion against a sunset sky. A bright yellow circle is positioned on the left side, overlapping the first runner. Several thin, light blue circles of varying sizes are scattered across the image, some overlapping the runners and the text.

# Utilising a self-case study assessment to enhance student learning and facilitate the application of social cognition theory.

Dr Garry Prentice,  
DBS Research Day 2019

# Objectives

Incorporate a self-case study assessment within an assignment

Examine the utility of a self-case study student assessment approach

Examine student personal reflections on their exercise expectations, intentions and behaviour within a social cognition framework



# Background

## Anticipated Regret

Important in intention formation? (Abraham & Sheeran, 2004)

## Exercise expectations

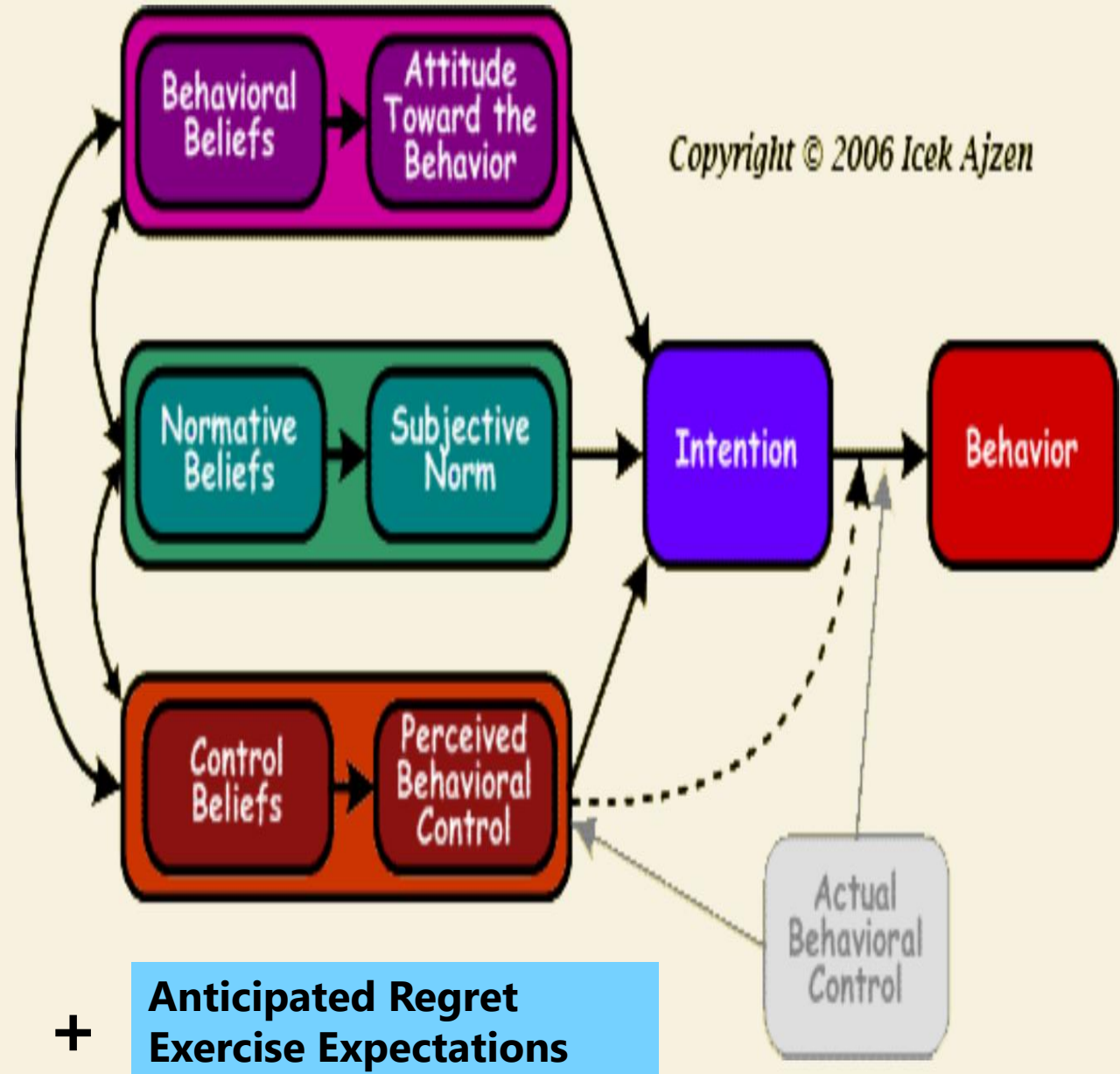
Physical, Social & Self-evaluation; older population

## Case studies

Problem-based learning

## Self-case study

Application of theory to the real world; examination of own behaviour as an independent observer (Bolton, 2005)



# Method

## Participants:

31 undergraduate full-time Psychology students

**Design:** Qualitative & Quantitative, Cross-sectional, Online Quantitative Questionnaire, Qualitative responses within an essay related to the questionnaire themes

## Online Questionnaire: (Quasi-Interview Schedule)

Theory of Planned Behaviour Questions (Ajzen)

Anticipated Regret (Abraham & Sheeran, 2003)

Multidimensional Outcome Expectations for Exercise Scale (Wojcicki, White & McAuley, 2009)

Godin Leisure-Time Exercise Questionnaire (Godin, 2011)

# Procedure

Completion of online questionnaire

Group and individual results given back to students

Students completed the essay assignment (with a self-case study component) based on the variables/themes covered in the questionnaire

## **Essay Question:**

Critically examine Theory of Planned Behaviour (TPB: Attitudes, Subjective Norm, Control, Intentions and Behaviour), exercise expectations, anticipated emotions and gender variables in relation to exercise, through producing an essay incorporating: - (1) the theoretical/ research background in relation to each variable listed, in terms of their links with exercise (40%), (2) a case study\* incorporating the variables listed (30%), and (3) conclusions and recommendations (20%) derived from the case study and associated research. (N.B. 5% for expression/ structure and 5% for referencing)

\*The case study will be based on your own responses to a questionnaire, made available to the class at the start of term, measuring the listed variables. Further explanation will be provided in class, including within the Health Behaviour lecture, which covers health behaviour models including TPB.

*Further breakdown of the marking for each section: -*

- (1) The theoretical/ research background in relation to each variable listed in terms of their links with exercise (40%)*
  - TPB (10%)*
  - Exercise expectations (10%)*
  - Anticipated emotions (10%)*
  - Gender (5%)*
  - Aims/ rationale (5%)*
- (2) Case Study (30%)*
  - Results coverage (10%)*
  - Interpretation (10%)*
  - Personal reflection (10%)*
- (3) Conclusions (10%) and Recommendations (10%)*

stud_num	Intentions_total	ATTITUDE_TOTAL	SUBJECTIVE_NORM_TOTAL	BEHAVIOURAL_CONTROL_TOTAL	STRENUOUS	MODERATE	MILD	EXERCISE_UNITS	PHYSICAL_OUTCOME_EXPECTATIONS	SOCIAL_OUTCOME_EXPECTATIONS
Hypothetical 1	15.00	20.00	9.00	20.00	0	1	4	17.00	26.00	

Descriptive Statistics		
	N	Mean
Intentions_total	77	16.2597
ATTITUDE TOTAL	72	26.3889
SUBJECTIVE_NORM_TOTAL	77	10.2727
BEHAVIOURAL_CONTROL_TOTAL	76	21.1842
STRENUOUS	77	2.08
MODERATE	77	2.75
MILD	77	3.19
EXERCISE_UNITS	77	42.0519
PHYSICAL_OUTCOME_EXPECTATIONS	77	26.7662
SOCIAL_OUTCOME_EXPECTATIONS	77	12.1299
SELF EVALUATION OUTC	77	22.0909

Descriptive Statistics			
GENDER		N	Mean
male	Intentions_total	24	17.0417
	ATTITUDE_TOTAL	23	28.7826
	SUBJECTIVE_NORM_TOTAL	24	10.4167
	BEHAVIOURAL_CONTROL_TOTAL	24	21.7500
	STRENUOUS	24	3.00
	MODERATE	24	2.54
	MILD	24	2.54
	EXERCISE_UNITS	24	47.3333
	PHYSICAL_OUTCOME_EXPECTATIONS	24	26.9583
	SOCIAL_OUTCOME_EXPECTATIONS	24	12.8333

## 2. Case Study (30%)

### Results coverage (10%)

<p><b>Fail</b></p> <p><i>Brief and/ or inaccurate no detail</i></p> <p>1 2 3</p>	<p><b>Pass</b></p> <p><i>Brief but at least mentions the areas of interest</i></p> <p>4 4.5</p>	<p><b>2:2</b></p> <p><i>Quite detailed and accurate mostly</i></p> <p>5 5.5</p>	<p><b>2:1</b></p> <p><i>Detailed and accurate</i></p> <p>6 6.5</p>	<p><b>FIRST</b></p> <p><i>Very Detailed and accurate</i></p> <p>7 8 9 10</p>
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### Interpretation (10%)

<p><b>Fail</b></p> <p><i>Brief and/ or inaccurate no detail</i></p> <p>1 2 3</p>	<p><b>Pass</b></p> <p><i>Brief but at least mentions the areas of interest</i></p> <p>4 4.5</p>	<p><b>2:2</b></p> <p><i>Quite detailed and accurate mostly</i></p> <p>5 5.5</p>	<p><b>2:1</b></p> <p><i>Detailed and accurate</i></p> <p>6 6.5</p>	<p><b>FIRST</b></p> <p><i>Very Detailed and accurate</i></p> <p>7 8 9 10</p>
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### Personal reflection (10%)

<p><b>Fail</b></p> <p><i>Brief and/ or irrelevant/ no detail</i></p> <p>1 2 3</p>	<p><b>Pass</b></p> <p><i>Brief but at least mentions the area of interest</i></p> <p>4 4.5</p>	<p><b>2:2</b></p> <p><i>Quite detailed</i></p> <p>5 5.5</p>	<p><b>2:1</b></p> <p><i>Detailed</i></p> <p>6 6.5</p>	<p><b>FIRST</b></p> <p><i>Very Detailed</i></p> <p>7 8 9 10</p>
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# Results



# Attitude

## First Qualitative Theme

5

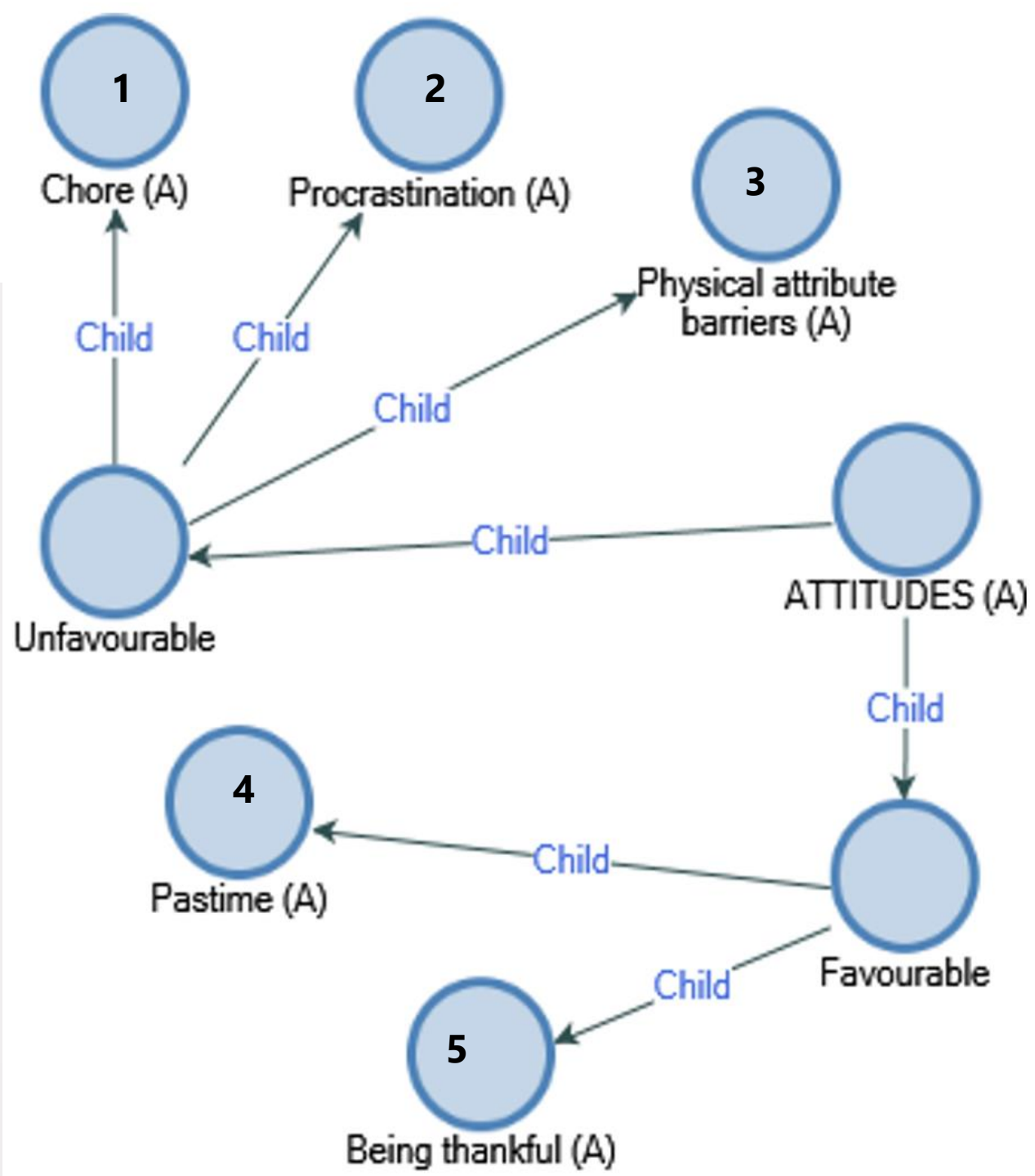
Practicing **daily gratitude** is a strategy that I could implement to improve my attitude and in turn my exercise habits. (HS)

2  
procrastination when it comes to exercise (AF)

1  
I find it hard to find time to exercise as it can sometimes be **inconvenient** for me. (KH)

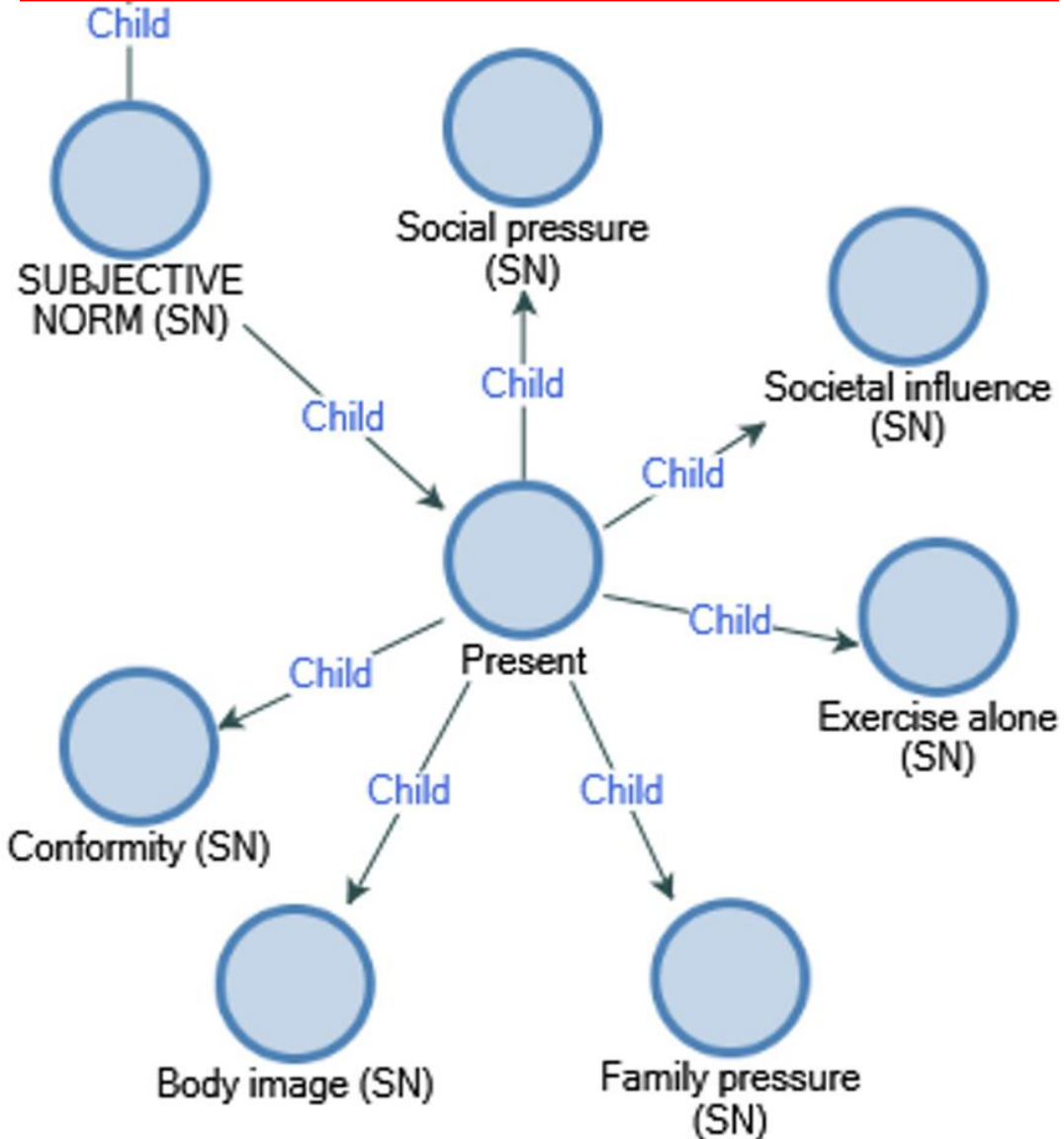
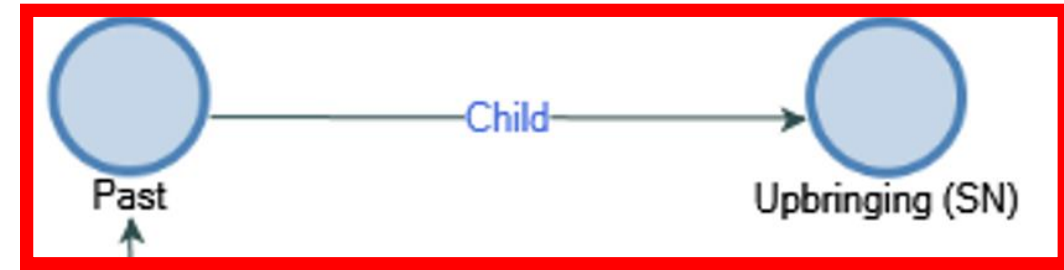
3  
I have **never been especially concerned** with weight (one of the advantages of being tall). (AMK)

4  
enjoy it as a **hobby** in my free time (HH)



# Subjective Norm

## Second qualitative theme (PAST)



Coming from a family that regularly take part in range of physical activity and sports that range from mild to strenuous on weekly occurrence has also shaped the attitude that I should engage in physical exercise (LR)

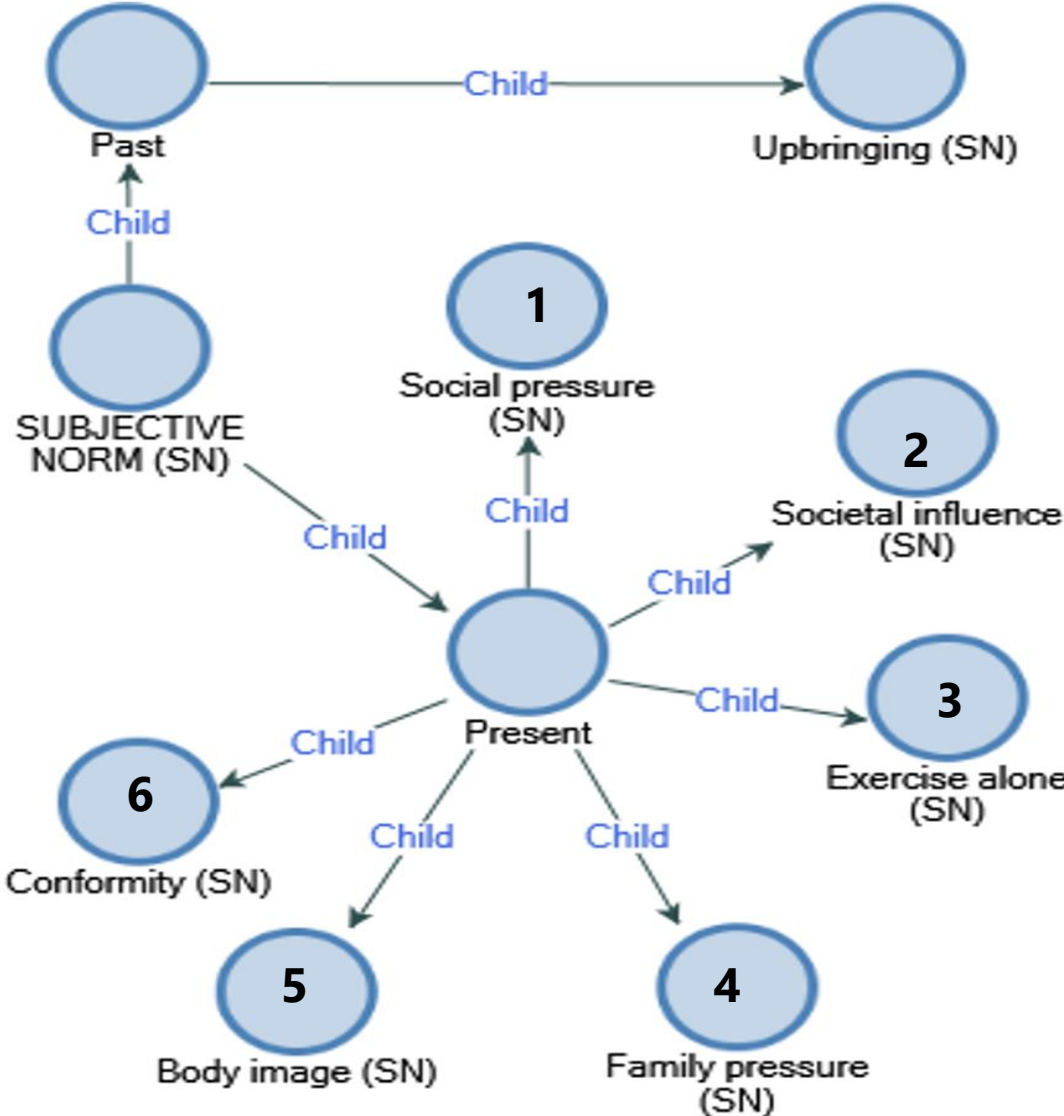
close relationship with sport and fitness **started at a very young age, I grew up with sport** being part of my everyday life. (HD)

the background I was raised in, I have been into **fitness for as long as I can remember** (JOR)

In Secondary school education school was based around learning academically but also put great emphasis on **mandatory after school exercise activity** in my case through the sport of rugby for five days a week. (LR).

# Subjective Norm

## Second qualitative theme (PRESENT)



4 family influence my decision to exercise. (HoS)

2 I exercise due to social pressures but expect no social outcome from it. (EC)

2 My ability to perform exceptionally well in my chosen sport is peer driven and motivated by social inclusion... (LR)

5 develop a more positive body image and move away from caring about how I'm perceived by others (AC)

3 my exercise is in the gym by myself. (AF)

6 conform with the beliefs of my social circle regarding exercise behaviour (HoS)

2 don't feel as much societal pressure (DN)

1 I am more vulnerable to being swayed by other people's opinion I should conduct my own research and experience different types of exercise in order to make an informed decision. (RR)

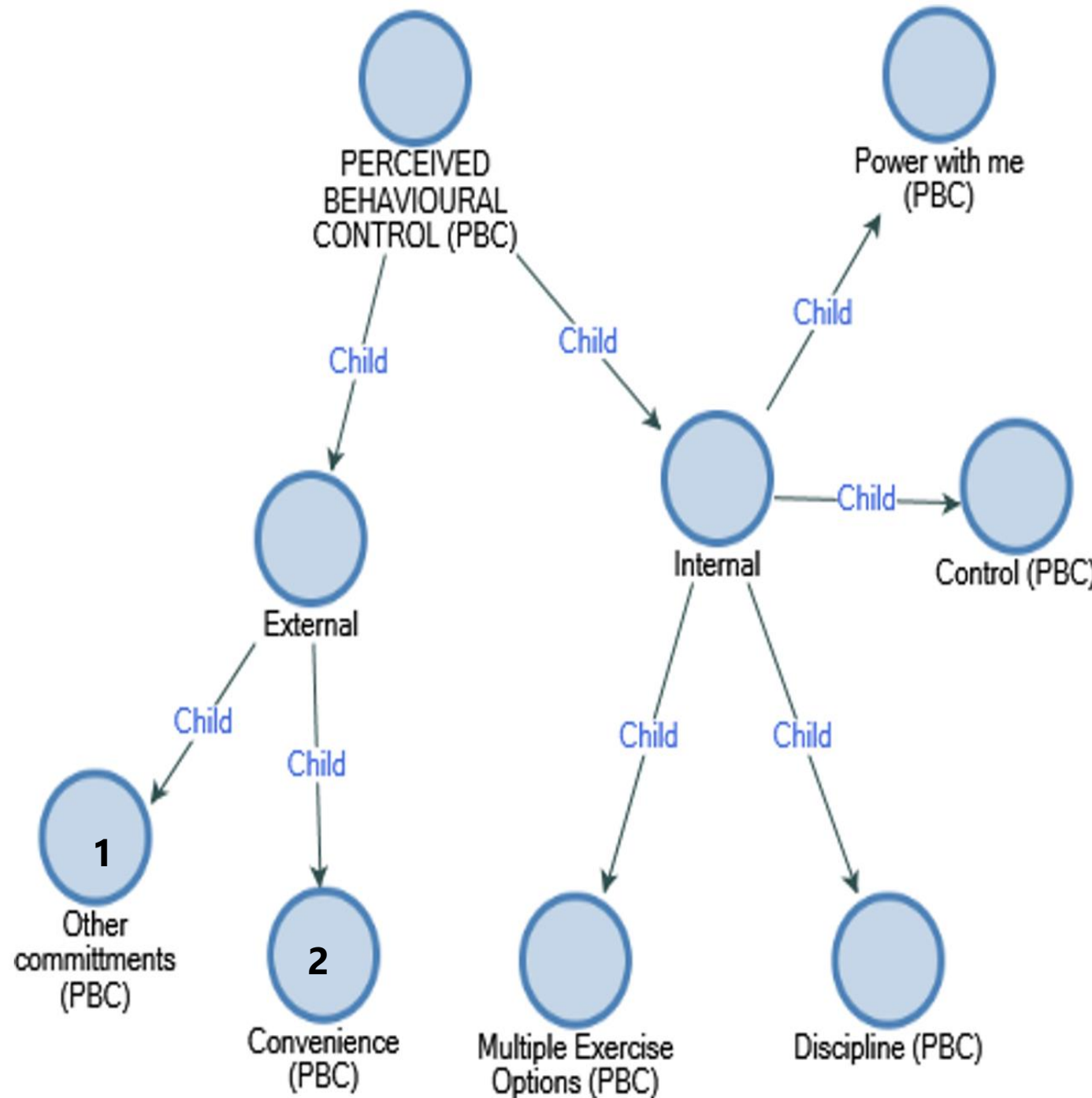
ease of access to exercise as I have a gym close by to my apartment. (AF)

I enjoy exercise, however it is often difficult and **inconvenient** to fit it into my daily routine. (RS)

being too busy **juggling part time work, full time studies and adequate sleep**. This feeling of **not being in control** hinders me to change my exercise behaviour (VT)

# PBC

## Third qualitative theme (EXTERNAL)



# PBC

## Third qualitative theme (INTERNAL)

2

high level of control over doing exercise and feel like I've **no barriers** to completing it such as time or capability. (MM)

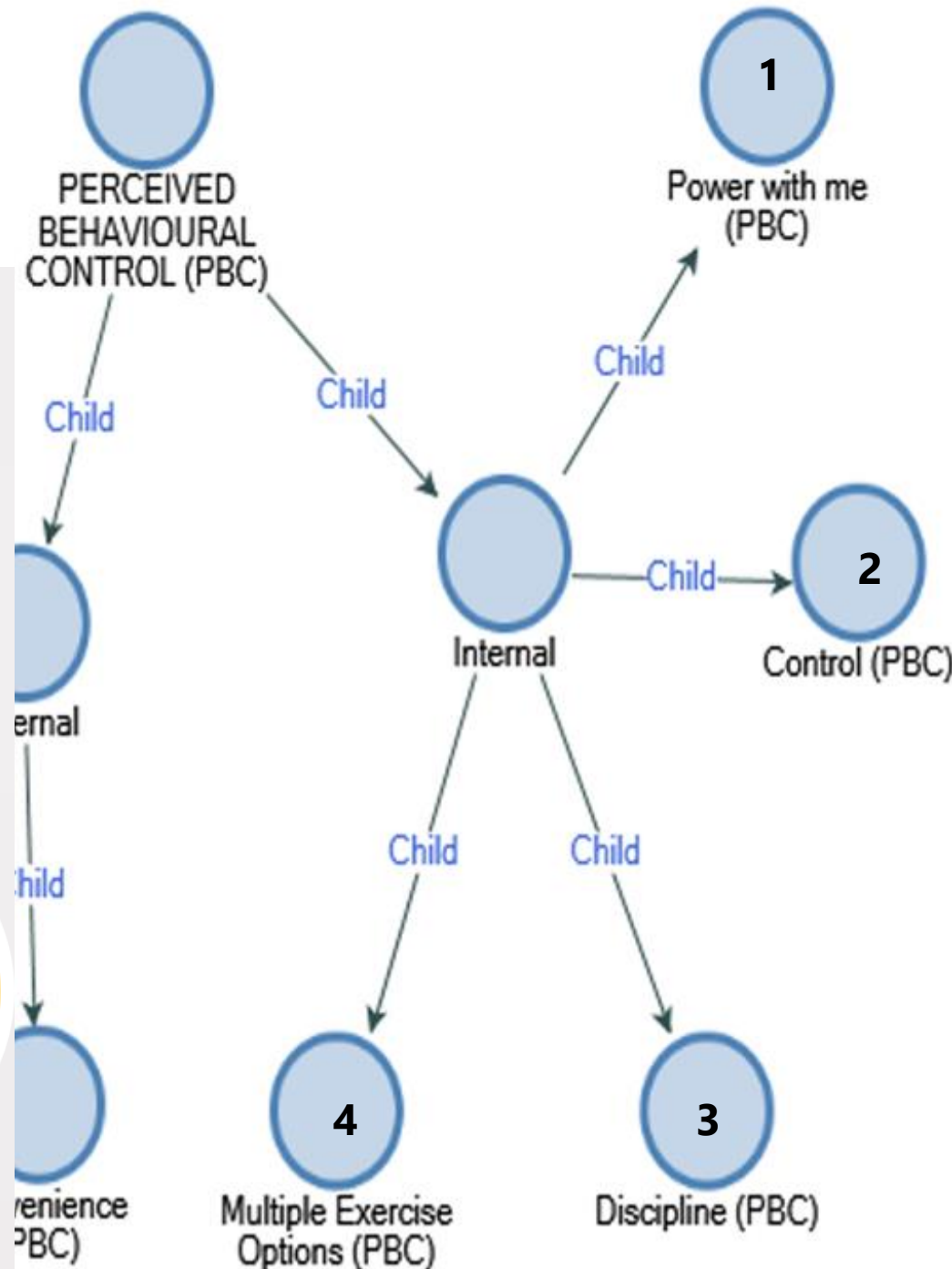
doing a mix of individual/team sports and indoor and outdoor activities I remain in control of my ability to do some form of exercise everyday. (CM)

improve my perceived behavioral control by **believing more in my capabilities to be disciplined.** (HoS)

3

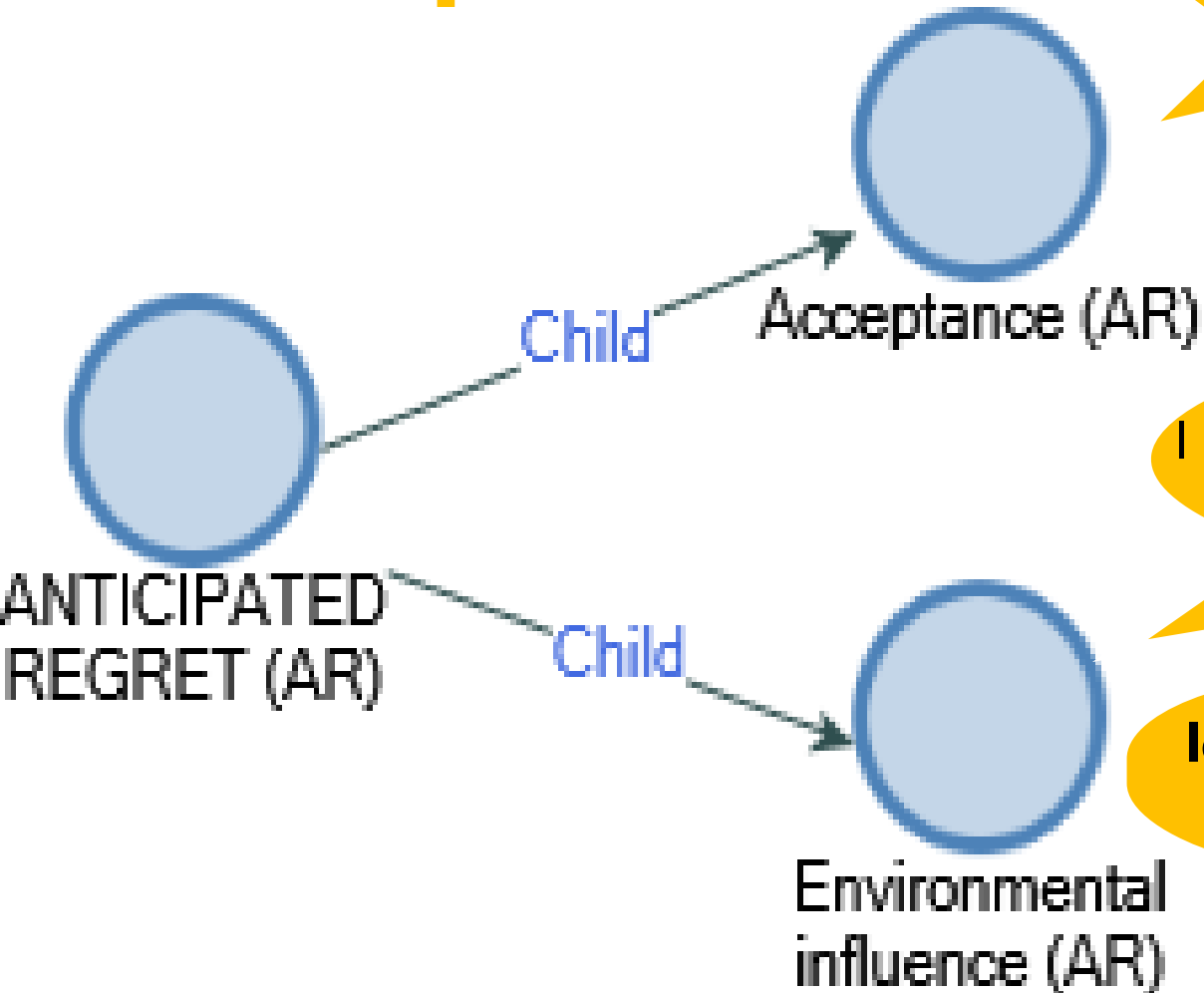
4  
mix of strenuous to mild exercise in my routine so I **don't come up against** any barriers to daily exercising such as **exercise fatigue or lack of accessibility** to a gym. (CM)

1  
power to exercise when I feel like I should. (AC)



# Anticipated Regret

Fourth qualitative theme



I **wouldn't scold myself** if I wasn't being physically active. (VT)

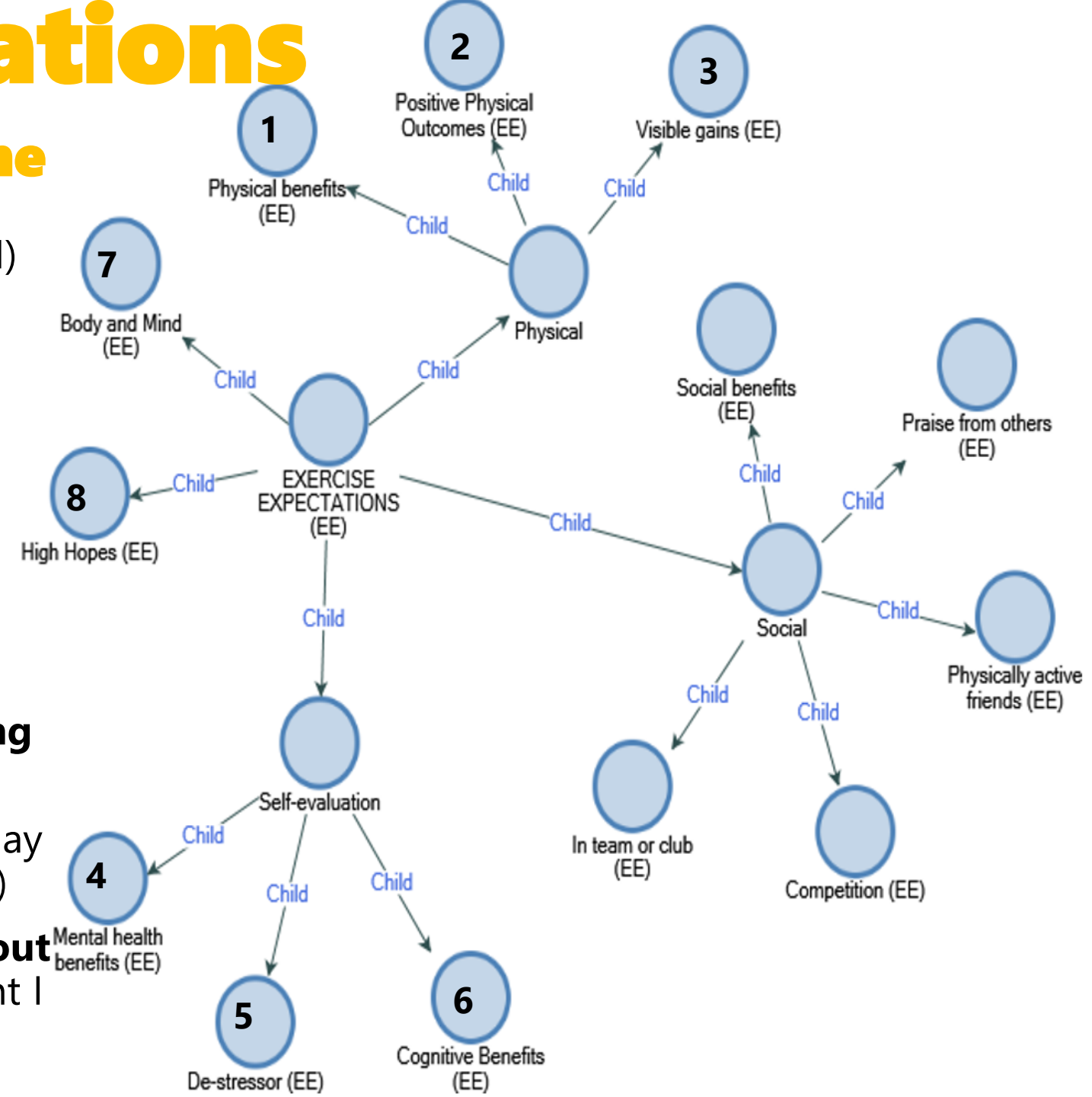
I am **not in an environment** that will help me **harbour feelings or regret** for too long (DN)

**letting the team down** if I miss a game. (LR)

# Exercise Expectations

## Fifth qualitative theme

1. "...physical body is **not exercised and oxygenated** my brain becomes **lazy**." (CM)
2. "...benefits of regular exercise in terms of **weight control, muscle building, and an increase general fitness**." (RS)
3. "I can **see the physical gain** after the past few months of training and dieting." (EC)
4. "...psychological wellbeing and relief." (HD)  
"...beneficial effects on mood and self-esteem...depression." (LR)
5. "I generally use exercise as a **stress relieving** mechanism..." (MC)
6. "I feel as if I won't be as **sharp** during the day in question if I do not participate in it." (OC)
7. "...experiences of exercising I **felt good about my body and my mind** therefore, I thought I would **think and feel good after**." (VT)





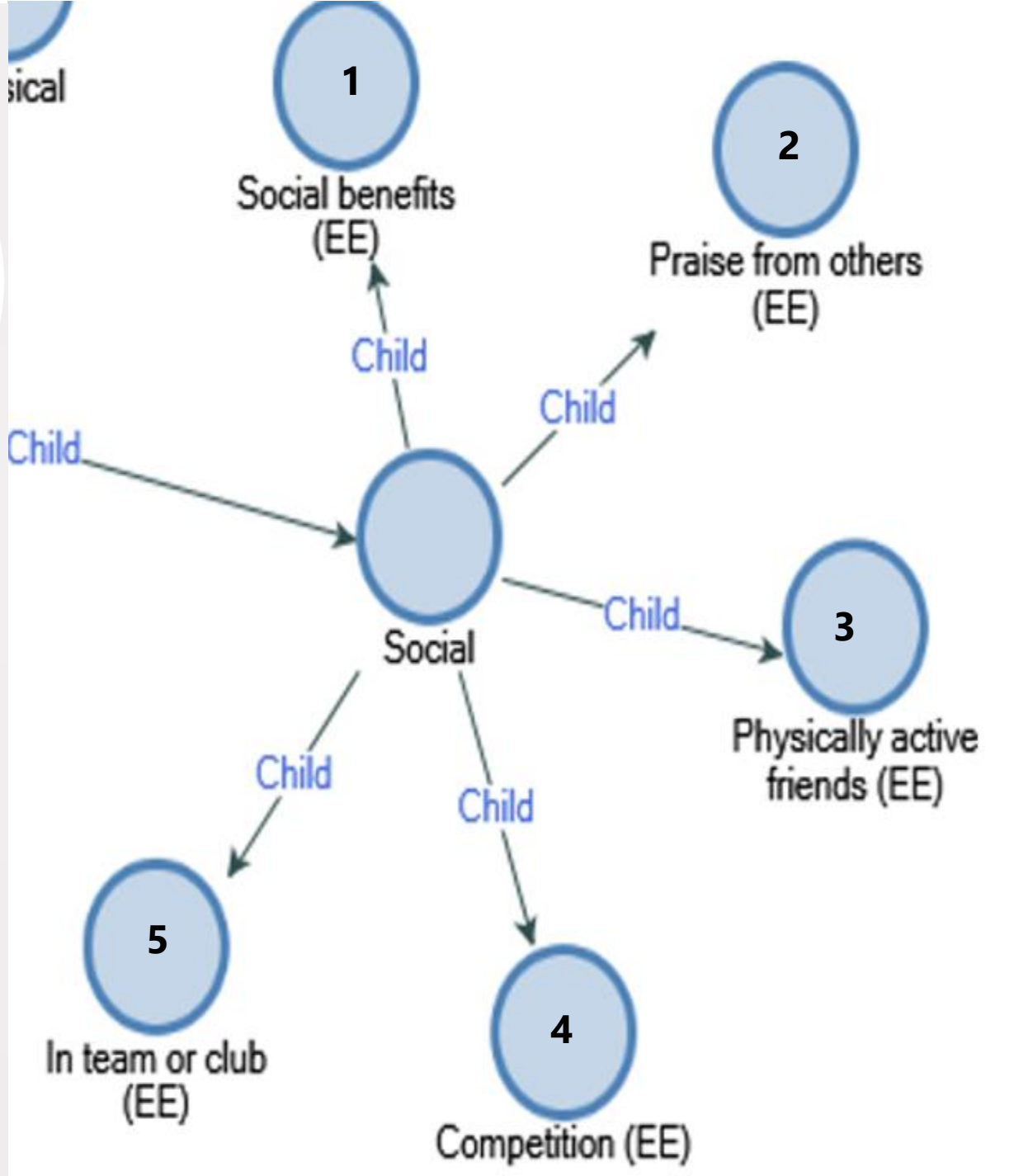
1  
The **lack of my peers who engage in exercise** also affects my level of social outcome benefits in relation exercising. (SK)

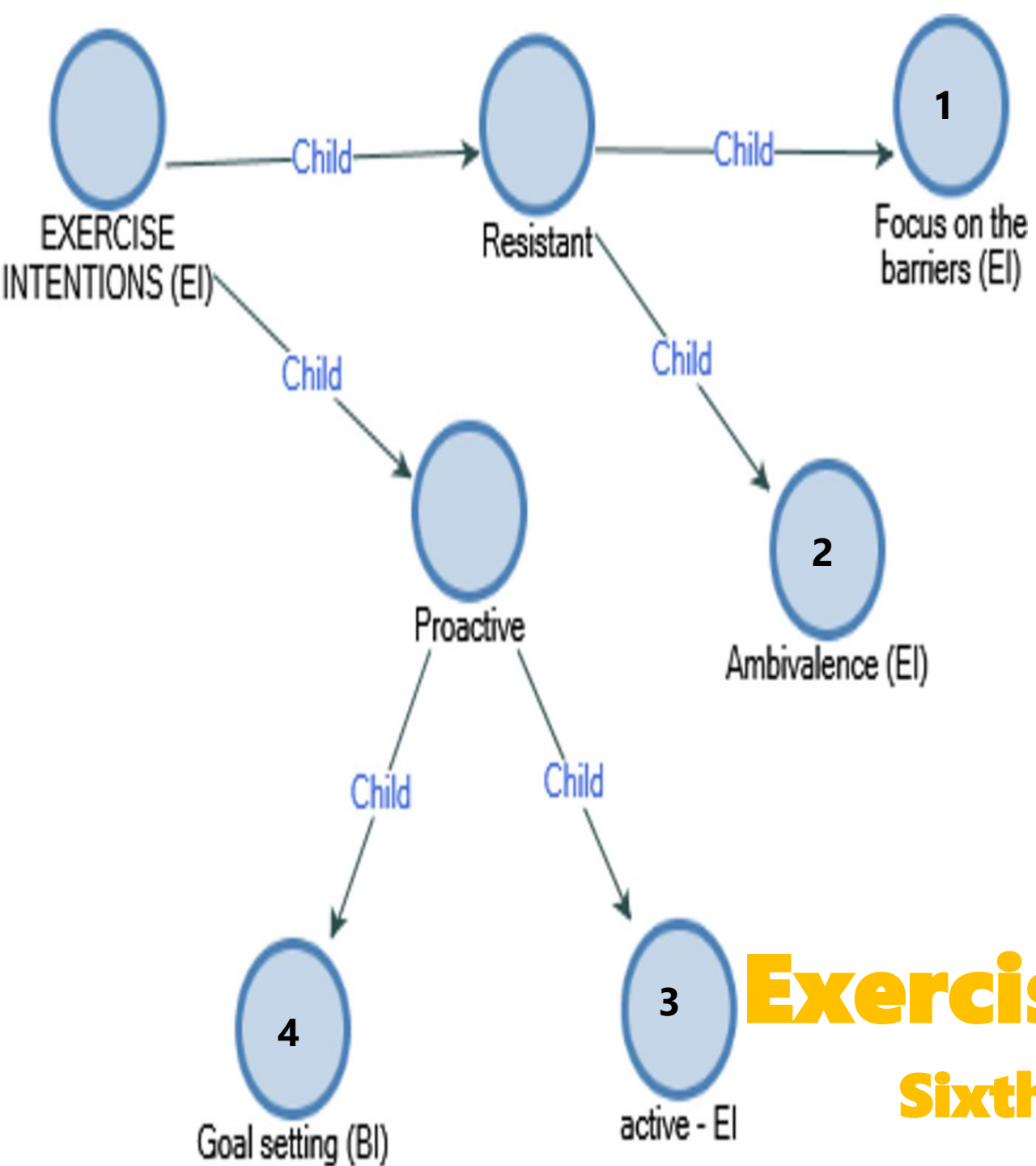
I could take up team sports or exercise with friends to introduce a social aspect. (MC)

2  
Perhaps it's also a vanity thing, seeking the approval and **praise of others** by getting into better shape. (AC)

3  
**people in the gym** are so friendly and motivate each other to achieve the best we can (EC)

4  
I would consider exercise a type of "social outing". As I come from a **competitive** swimming/triathlon background I would be open for talking about passed achievements & accolades, sports goals and also learning different techniques and what works for each athlete. (OC)





1  
when it comes time to exercise I will think of reasons not to. (AF)

2  
I was struck by my ambivalence towards engaging in exercise (AMK)

3  
I incorporate exercise into my daily life (HH)

4  
Specific Measurable Attainable Relevant Time-bound (SMART) goals to achieve the small goals (EC)

# Exercise Expectations

## Sixth qualitative theme



Specific activities  
(EB)

# Exercise Behaviour

## Seventh qualitative theme

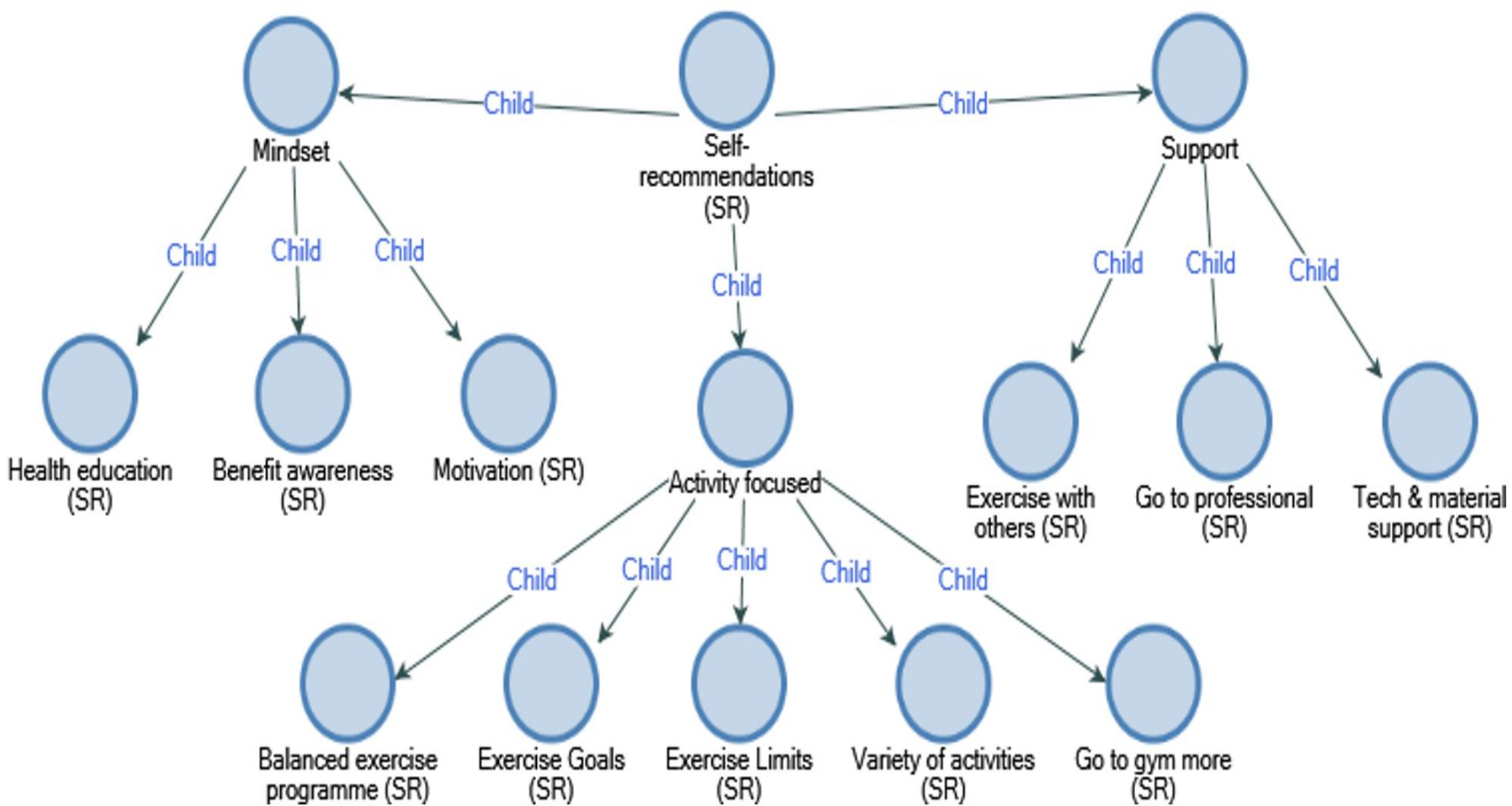
"...gym visits and dance classes." (RS)

"...walking the dog..." (RS)

"...martial arts training..." (SED)

"...walking to and from college..." (VT)

"...weekly badminton practice..." (VT)







“I could use to improve and enhance my exercise behaviours are to start **exercising with another person**. This could be a friend or family member.” (RR)

“the **gym or source help** from a personal trainer.” (SK)

“purchase a **FitBit**...download an **app**...” (AW)

“i) A more consistent fitness plan could lead to a more consistent self-evaluation. ii) Maintain a better balance between diet and exercise to improve my physical outcome expectations.” (MC)

“...set daily...set monthly goals...” (AW) “...body weight goal...” (HH) “...realistic, weekly goals I would like to accomplish, such as walking home from college daily or attending the gym for three hours weekly” (RR)

“important to not over do it and let your body rest and recover” (HH)

“Try different forms of exercise, swimming, running, yoga, group classes etc” (HH)

“decrease regret levels by attending the gym more to increase feelings of money well spent for gym subscription cost” (AF)



# activity

1. Background			2. Results					3. Conclusions & Recommendations				
TPB (10%)	Exercise expectations (10%)	Anticipated emotions (10%)	Gender (5%)	Aims/rationale (5%)	Results coverage (10%)	Interpretation (10%)	Personal reflection (10%)	Conclusions (10%)	Recommendations (10%)	Expression (5%)	References (5%)	FINAL RESULT
7.12	5.83	5.68	3.02	2.44	7.62	6.42	5.59	4.58	3.45	3.21	3.45	58.70

## 2. Case Study (30%)

### Results coverage (10%)

Fail	Pass	2:2	2:1	FIRST
Brief and/ or inaccurate no detail	Brief but at least mentions the areas of interest	Quite detailed and accurate mostly	Detailed and accurate	Very Detailed and accurate
1 2 3	4 4.5	5 5.5	6 6.5	7 8 9 10
				<b>7.6</b> $r = .77$

### Interpretation (10%)

Fail	Pass	2:2	2:1	FIRST
Brief and/ or inaccurate no detail	Brief but at least mentions the areas of interest	Quite detailed and accurate mostly	Detailed and accurate	Very Detailed and accurate
1 2 3	4 4.5	5 5.5	6 6.5	7 8 9 10
			<b>6.4</b>	$r = .77$

### Personal reflection (10%)

Fail	Pass	2:2	2:1	FIRST
Brief and/ or irrelevant/ no detail	Brief but at least mentions the area of interest	Quite detailed	Detailed	Very Detailed
1 2 3	4 4.5	5 5.5	6 6.5	7 8 9 10
		<b>5.6</b>		$r = .69$
			<b>LR (6.5), VT (6.5), RS (6.5), EC (7), AF (8)</b>	

**Case study aspect had the strongest correlations with overall result**

# **Conclusions & Future Directions**

**Deeper learning and personal development opportunities facilitated by self-case study/ personal reflection?**

***Qualitative – individual insights***

***Quantitative – case study aspect strongest link to better results in the assignment***

**Opportunity to examine students' awareness of own health and exercise intentions**

***Health promotions...***

***Future directions – more student cohorts...***