

ACPSM

# The Role Of Psychology in Dealing with Sport Injuries



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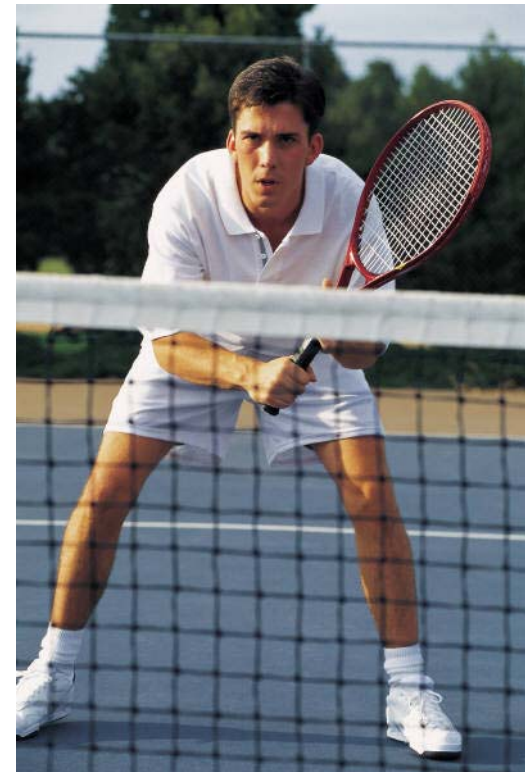
# 2 main areas in research on psychology of sport injury





# Aims of Session

- ◆ Examine responses to injury and why they occur
- ◆ **Consider current theoretical models**
- ◆ Identify evidence-based strategies to assist athletes in dealing with injury



# Three types of responses to injury



- 1) **Cognitive (thoughts)** –
  - ‘That’s it – my season is over’
- 2) **Affective (emotions)**
  - Anger/ upset/ depressed
- 3) **Behaviour**
  - Effort in rehab/ Give up/  
Do other things



**SKIER**

(Udry et al., 1997)



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# Significance of injury

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*‘I wouldn’t wish injury on anyone, but you don’t really know what the game’s all about until you’ve experienced it’*

(Steve Backley)

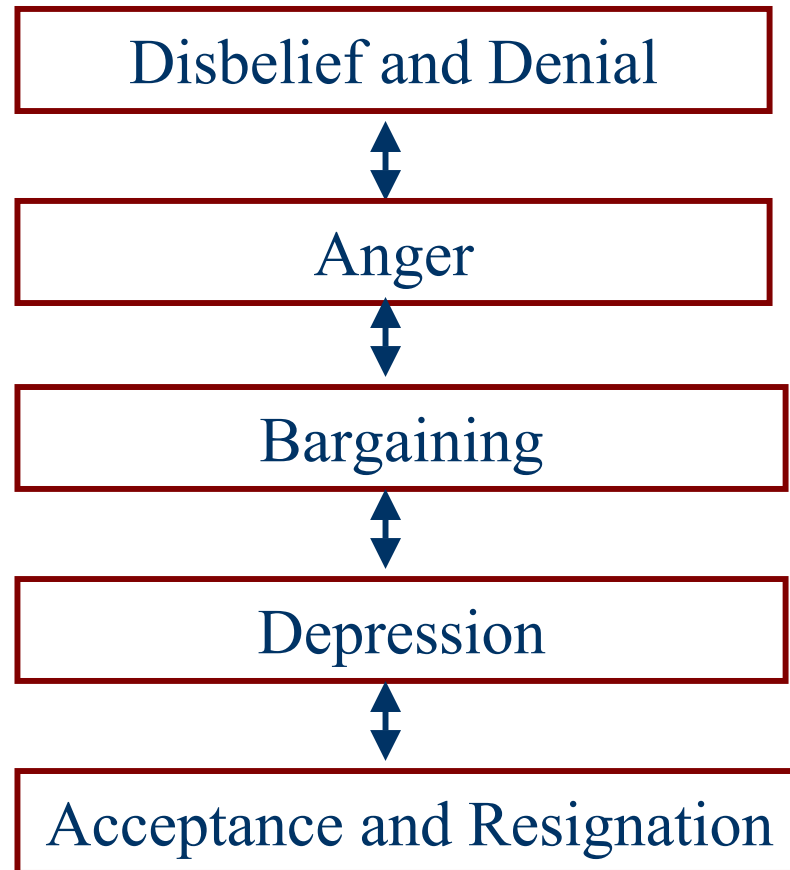


# 1) Stage Models

- ◆ Relates to thought and feeling responses - adapted from models of grief/loss
- ◆ Key assumption:
  - injury constitutes a loss of an aspect of self
  - athletes' responses will be sequential and follow a predictive pattern
- ◆ Grief Response is most common stage model in SP – based on Kubler-Ross' (1969) book *On Death and Dying*



# Kubler-Ross Model





# Problems with this model?

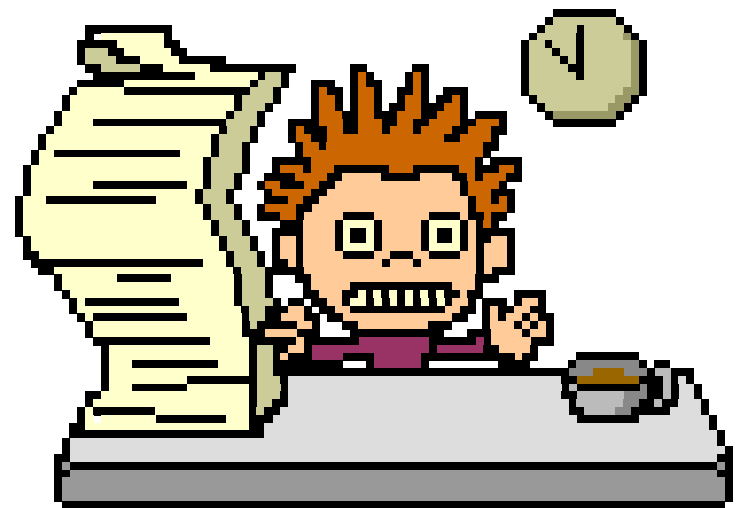
- ◆ **Is it appropriate?**- significant differences between terminal illness and injury
- ◆ Research suggests **very little evidence of denial** in athletes (e.g., Udry et al., 1997)
- ◆ Athletes' don't respond to injury in such a **stereotypic manner** (a lot of individual variation/ fluctuations in emotions) (Brewer, 1994)
- ◆ **Further research required**



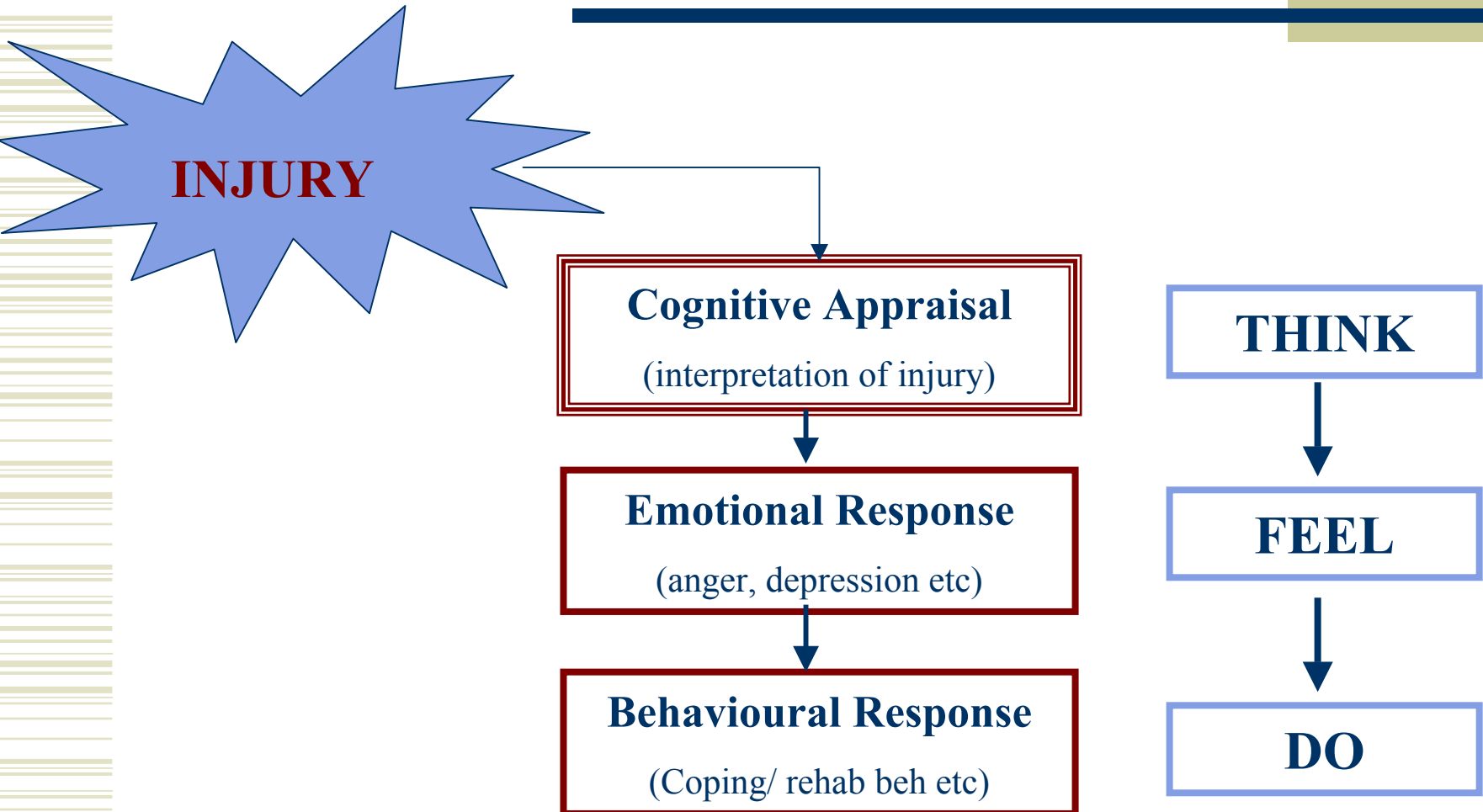


## 2) Cognitive Appraisal Models

- ◆ Response to injury is dependent on how we think about the injury
- ◆ Based on stress and coping models (Lazarus & Folkman, 1984)



# Brewer's (1994) Model of Response to Sport Injury



# 2 components to how we think about the injury

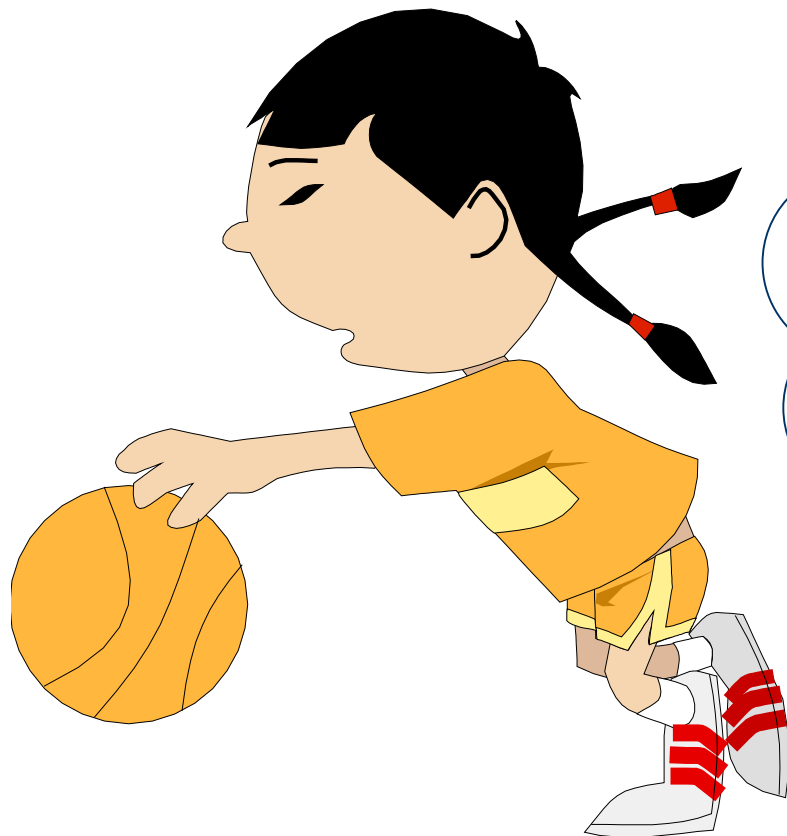


- ◆ Primary appraisal:
  - Is the injury a threat to my well-being and goal achievement?
- ◆ Secondary appraisal:
  - Do I have the resources to cope effectively with the injury?



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Lilly



**1) I've sprained my ankle and it could stop me playing in the final championship game in only 3 weeks**



# Billy



**1) I've sprained my ankle and it could stop me playing in the final championship game in only 3 weeks**



# Lilly



**2) My team-mates and coach will help me stay involved, and I can work hard in rehab and get back asap.**



# Billy



**2) That's it! It's all over – I know I can't get back in 3 weeks.**



# Appraisal leads to...

## 1) Emotional response (FEEL):

- ◆ **LILLY =**
  - Positive attitude/  
outlook
- ◆ **BILLY =**
  - Frustration/ anger/  
depression/ fear

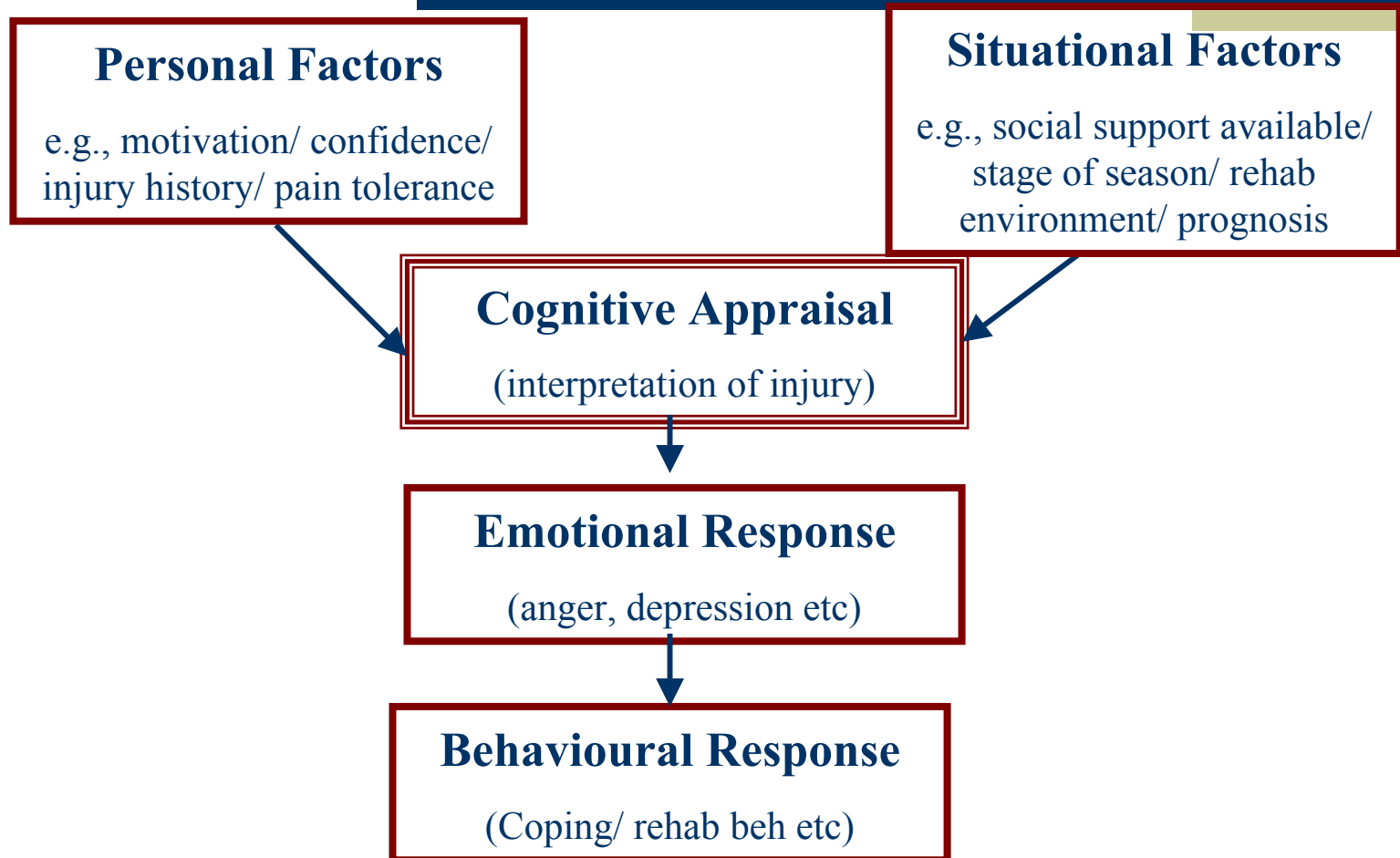
## 2) Behavioural response (DO):

- ◆ **LILLY =**
  - Compliance to rehab/  
high effort
- ◆ **BILLY =**
  - Lack of  
effort/withdrawal





# Factors that influence cognitive appraisal





# Practical implications

- ◆ How the athlete **THINKS ABOUT** their injury is crucial
- ◆ Possible STRATEGIES:
  - Ask athlete about their perceptions of their injury
  - **Challenge and question** unhelpful thinking
    - Catastrophising
    - Unrealistic
    - Negative
    - Personalisation
  - Reinforce the role that thoughts play in successful rehab
  - Referral to psych?



# Focus on behavioural responses

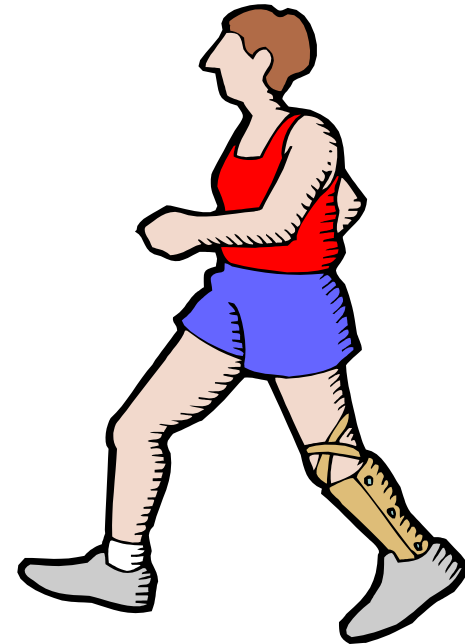
- ◆ How an athlete thinks and feels about an injury and/or rehab will influence behaviour
- ◆ Focus on **rehabilitation compliance**





# Defining compliance

- ◆ **Compliance** = extent to which athletes follow recommended rehabilitation behaviour
- ◆ **Over-compliance and under-compliance**





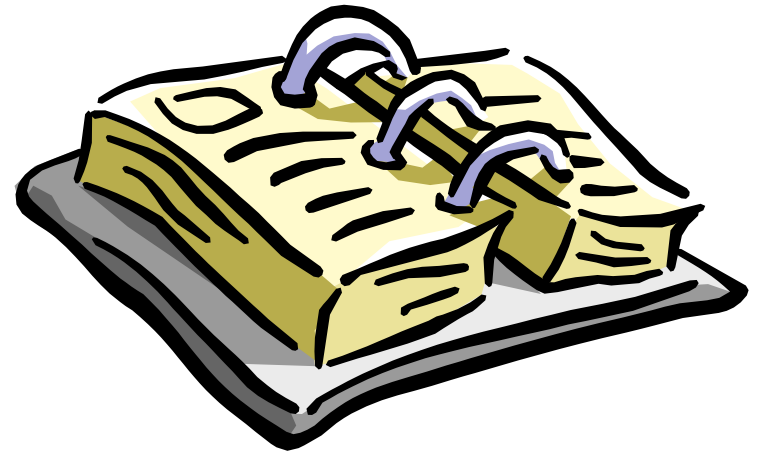
# Is compliance an issue?

- ◆ Current estimates of compliance:
  - range from 40 – 91% (Brewer, 1998)
  - ↓ Length of rehab program
  - ↓ Home-based
- ◆ In survey of UK physiotherapists good compliance was associated with coping well with injury (Hemmings & Povey, 2002)



# How do we measure compliance?

- ◆ Attendance
- ◆ Self-report of completion of home-based activities (diary)
- ◆ Practitioners' observation or estimate of home/hospital adherence





# What factors effect compliance?

## ◆ Personal factors:

- **Self-motivation**
- **Pain tolerance**
- **Toughmindedness (assertive/independent/ self-assured)**
- **Trait anxiety (-vely)**

## ◆ Situational factors

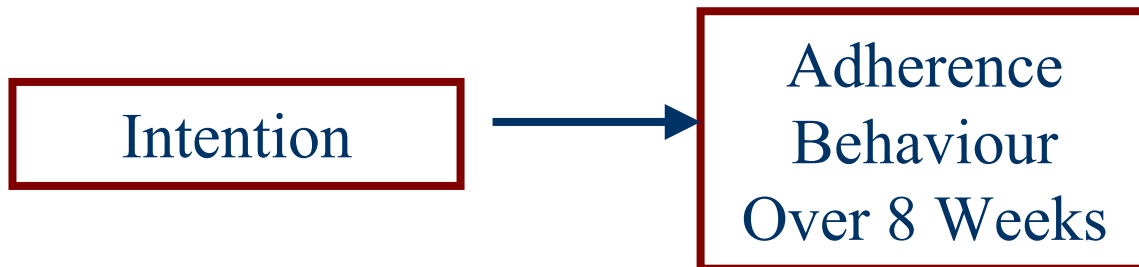
- ◆ **Belief in efficacy of treatment**
- **Perceived support during rehab**
- **Convenience of rehab scheduling**



# But need a theoretical framework

- ◆ **Current study based on Theory of Planned Behaviour (Ajzen, 1985, 1991)**
  - **With Musgrave Park – ACL rehab behaviour**
  - **With SINI – range of injuries (min 6-week rehab period)**
- ◆ **Identify what factors are most influential in predicting rehab behaviour and then target these to increase compliance**







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# Intention immediate determinant of behaviour

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- ◆ ‘I intend to follow the recommended rehab programme in next 8 weeks’



**Attitude**  
Towards Following  
Rehab Prog



**Intention**



**Adherence  
Behaviour  
Over 8 Weeks**



# Attitude

- ◆ **Person's overall evaluation of performing the behaviour in question**
- ◆ **'For me to follow the recommended rehabilitation programme in the following 8 weeks would be'**
  - unimportant-important
  - useless-useful
  - harmful-beneficial
  - enjoyable-unenjoyable



# Influencing attitudes – *Practical strategies*

## **SOURCE:**

(physio & coach)  
credible/ trustworthy/  
attractive



## **MESSAGE:**

unambiguous/ supported  
with evidence/ fear-  
inducing?



## **Persuasive communication:**

*Highlight importance of compliance*



# Influencing attitudes – *Practical strategies*

- ◆ **MODELLING** - We form attitudes by observing the consequences of other's behaviour
- ◆ Use role models who have successfully completed rehab—
  - e.g.:
  - Beckham
  - Team-mates
  - Support groups



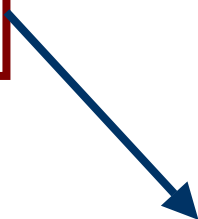


Perceived control

**Attitude**  
Towards Following  
Rehab Prog

Intention

Adherence  
Behaviour  
Over 8 Weeks





# Perceived control

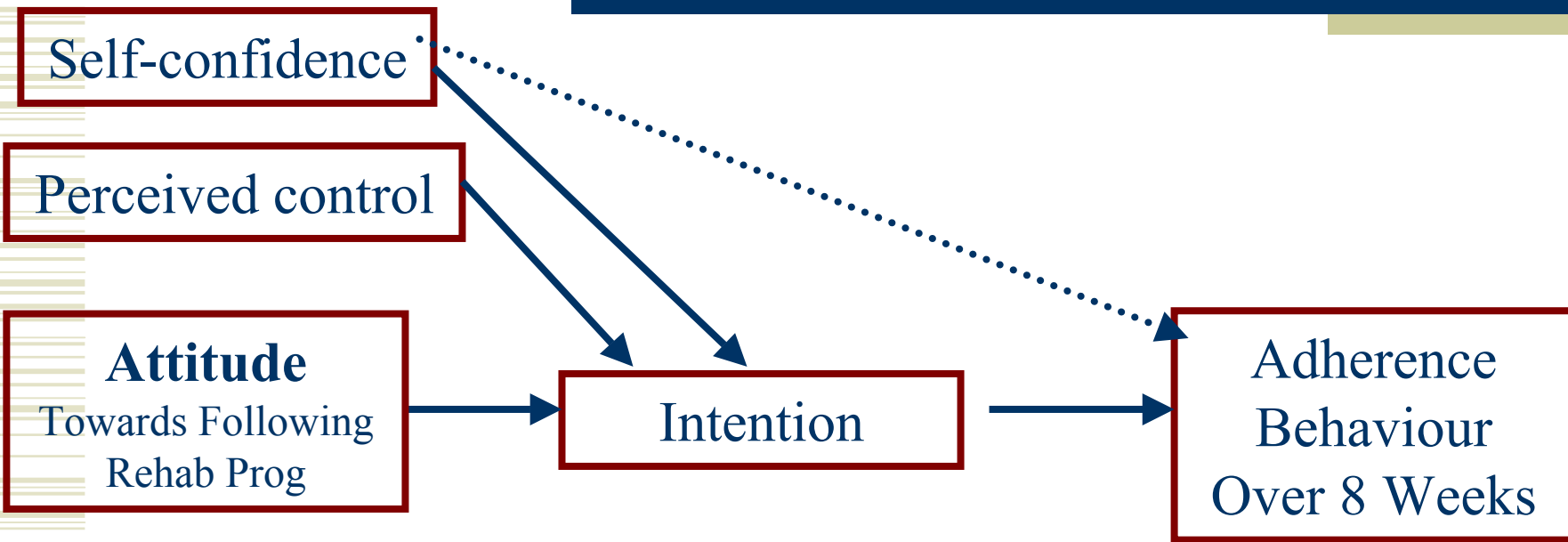
- ◆ Is it under my control whether I carry out the rehab programme or not?
- ◆ *‘It is mostly up to me whether I follow the prescribed rehabilitation programme for the next 8 weeks’*
- ◆ What factors could influence control?
- ◆ Practical implications/ strategies?





# Influencing PC - *Practical strategies*

- ◆ Assist in removing barriers to successful completion of rehabilitation
- ◆ E.G.,
  - Scheduling times/ places etc
  - ??





# Self-confidence

- ◆ Behaviour may be under athletes control but how confident is the athlete that they have the ability to complete the rehab programme
- ◆ *‘I believe I have the ability to complete the recommended rehabilitation programme for the next 8 weeks’*
- ◆ Factors that could influence self-confidence?

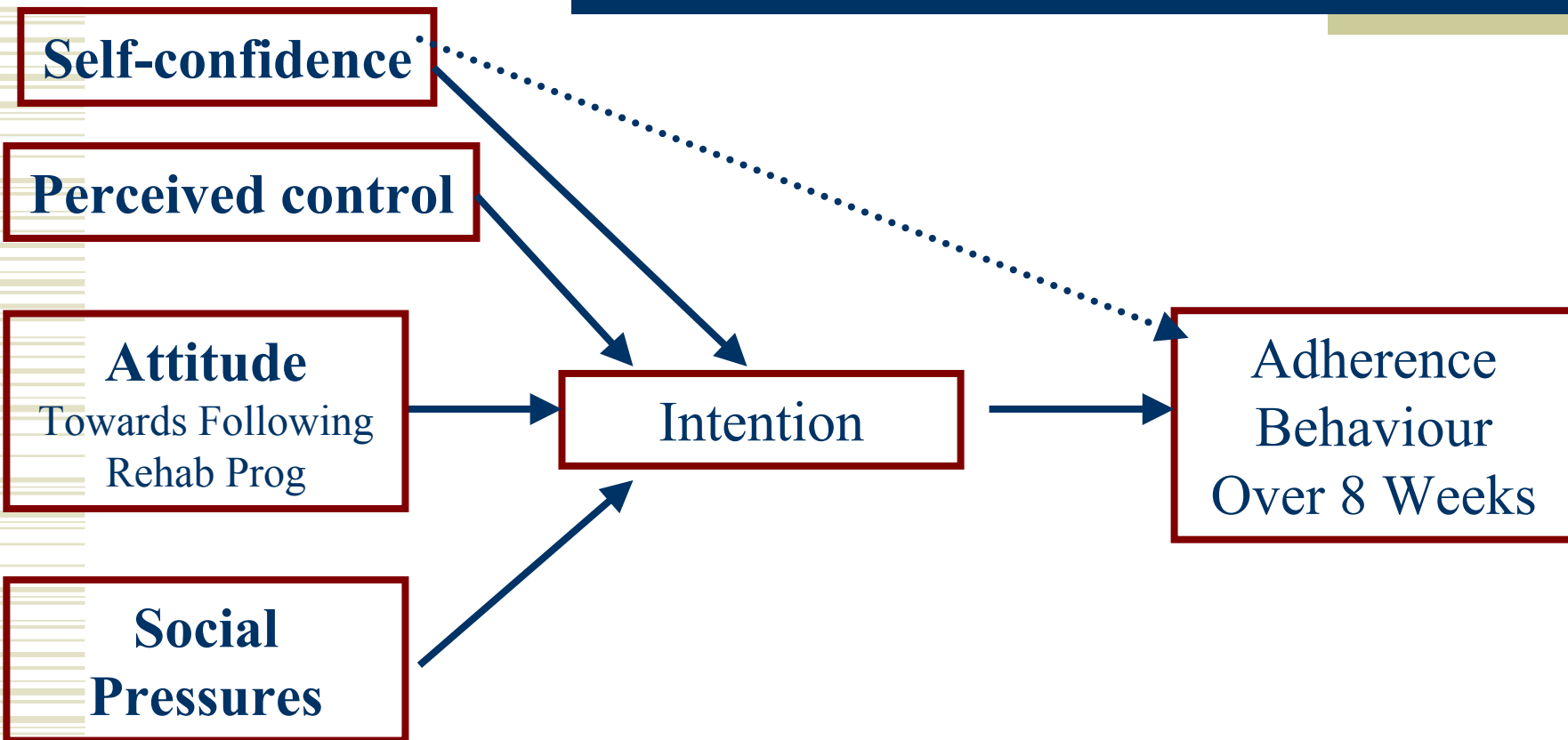


# Influencing self-confidence - *Practical strategies*



- ◆ **Build upon previous success**
  - goal setting
  - diary
- ◆ **Modelling**
- ◆ **Persuasive communication**
  - From others and self







# Social pressures

- ◆ **Social pressures relates to an individual's perception of the pressures put on him/her by important others to perform or not perform the behaviour**
- ◆ *‘People who are important to me, want me to follow the recommended rehabilitation programme for the next 8 weeks’*

# Influencing subjective norm - *Practical strategies*



- ◆ Incorporate significant others into consultation process?
- ◆ ??



# Call for volunteers

- ◆ Additional aspect of the TPB study
- ◆ Interview physios on what you think influences compliance behaviour
- ◆ Approx 1 hour interview at place of your convenience
- ◆ Please fill in form and leave your details





# Summary

- ◆ Athletes' responses to injury include **cognitive, affective** and **behavioural** responses
- ◆ Stage models and cognitive appraisal models help make sense of **cognitive** and **affective** responses
- ◆ TPB could be a useful framework for investigating and increasing compliance **behaviour**

# Game over

