

## References

---

**University of Western Ontario. (2010). *Educational Psychology and Special Education: EDUC 5005* (custom edition for the University of Western Ontario). Toronto, ON: Pearson.**

Behavioural:

**Classical:** Pavlov – how we learn involuntary emotional or physiological responses such as fear, increased heartbeat, salivation or sweating. These responses are called respondents because they are automatic responses to stimuli. p 44.

Neutral Stimulus – bell

Unconditioned stimulus – class beginning

Unconditioned response – anxiety/fear about being late

--

Conditioned stimulus – bell (signaling class is beginning)

Unconditioned response – anxiety when hearing the bell

--

**Operant:** B.F. Skinner - Learning in which voluntary behaviour is strengthened or weakened by consequences or antecedents p 46

Reinforcement – use of consequences to strengthen behaviour p 47

Punishment – process that weakens or suppresses behaviour

- Reinforcement strengthens behaviour
  - Positive – adding something to increases behaviour (wearing new outfit = complements = wear new outfit again)
  - Negative – removing something that increases behaviour (car seatbelt buzzer stops when seatbelt is clicked in= wearing seatbelt more)
  - Punishment involves decreasing or suppressing behaviour
  - Presentation Punishment= adding something that will reduce likelihood of behaviour (ie. running laps for being late, pushups for talking back)
  - Removal punishment = teacher takes privileges away
  - Continuous reinforcement schedule → Reinforced after each correct response
  - Cueing- providing an antecedent stimulus right before you expect a behaviour to occur
  - Prompt- reminder following the cue
-

- Differential Reinforcement – ignoring inappropriate behaviours, while being sure to reinforce appropriate behaviours as SOON as they occur
  - Token Reinforcement Program – system in which tokens earned for academic work and positive classroom behaviour can be exchanged for some desired reward
  - Contingency contract – a formal written agreement often between the teacher and student specifying what the student must do to earn a particular privilege or reward (p 65)
- 

### **Social cognitive -**

Social learning theory – theory that emphasizes learning through observation of others

Social cognitive – theory that adds concern with cognitive factors such as beliefs, self-perceptions and expectations to social learning theory

P 119.

---

- Reciprocal Determinism → explanation of behaviour that emphasizes the mutual effects of the individual and the environment on each other
  - Internal and external factors
  - Personal—beliefs, expectations, attitudes, knowledge
  - Physical & social environment – resources, consequences, other people, physical setting
  - Behaviour – individual actions, choices, verbal statements
  - Social factors (ie models, instructional strategies, feedback –*environment*) can affect student *personal* factors (goals, efficacy for task, beliefs about success/failure – *attributions*-) and processes of self regulation (ie planning, monitoring, controlling distractions)
  - Social influences in environment (ie. peers, teacher encouragement /reinforcement) can encourage achievement behaviours such as persistence and effort
  - As students achieve, confidence, interest and efficacy increase
  - Self-Efficacy → persons sense of being able to deal effectively with a particular task
  - Will I succeed or fail? Will I be laughed at? Will I be more accepted by teachers at new school?
  - -Mastery experiences – our own most direct experiences – most powerful source of efficacy info
  - –arousal – approach a task with anxiety/worry, or excitement
  - – vicarious experience – someone else models accomplishments, closer student identifies with model, higher efficacy
  - – modeling – changes in behaviour, thinking or emotions that happen through observing another person (model)
- 

**Weiten, W. & Lloyd, M. (2006). *Psychology Applied to Modern Life: Adjustment in the 21<sup>st</sup> century*. (pp. 44-50). Belmont, CA: Thompson Wadsworth.**

- Behaviourism is a theoretical orientation based on the premise that scientific psychology should study observable behaviour

- Major school of thought since 1913
- Prefer to think in terms of “response tendencies” which can be observed
- Tend to view personality as a collection of responses tendencies that are tied to various stimulus situations
- Classical Conditioning – a type of learning in which a neutral stimulus acquires the capacity to evoke a response that was originally evoked by another stimulus
- Classical conditioned responses were seen as reflexes because most are relatively involuntary
- CC contributes to acquisition of emotional responses such as fears, anxieties, and phobias
- Newly formed stimulus-response bond does not necessarily last indefinitely  
→ presentation is CS alone, without UCS can lead to extinction
- Operant Conditioning- animals and humans make responses that aren’t reflexive and don’t depend on a preceding stimulus
- I.e. studying
- “a form of learning in which voluntary responses come to be controlled by their consequences”
- governs a larger share of human behaviour
- because they’re voluntary, operant responses are said to be *emitted* rather than *elicited*
- “organisms tend to repeat those responses that are followed by favourable consequences, and they tend to not repeat those responses that are followed by neutral or unfavourable consequences”
- Reinforcement – positive – occurs when a response is strengthened because it is followed by the arrival of a pleasant stimulus
  - I.e. peer approval can encourage repeat behaviour
  - Study hard = get good grades
  - Responses followed by pleasant outcomes tend to become habitual patterns of behaviour
- Reinforcement – negative – occurs when a response is strengthened because it is followed by the removal of an unpleasant stimulus
  - Major role in development of avoidance tendencies (avoidance behaviour gets rid of anxiety and therefore behaviour is reinforced)
- Punishment – occurs when a response is weakened because it is followed by the arrival of an unpleasant stimulus (something aversive)
- Skinner assumes that conditioning strengthens and weakens people’s response tendencies “mechanically” – that is without their conscious participation
- “we can explain human behaviour without being concerned about individual’s mental processes” Skinner

#### Social Cognitive – Bandura

- added cognitive flavour to behaviourism
- in neglecting cognitive processes, skinner ignores the most distinctive and important feature of human behaviour
- belief that conditioning is not a mechanical process → instead individuals actively seek out and process information about their environment in order to maximize their favourable outcomes
- Self efficacy – when self efficacy is high – person feels confident in executing responses necessary to earn reinforcers

- Self efficacy is low – individual is worried that necessary responses are beyond their capabilities
- Self efficacy perceptions can influence which challenges people tackle and how well they perform
- Somewhat undermines the foundation on which behavioural psychology was built  
→ psychologists should only study observable behaviour (therefore critics complain that SCT isn't very behavioural anymore)

#### Evaluating Behavioural Perspectives

- firmly rooted in empirical research than clinical intuition
- provides most throughout account for why people are only moderately consistent in their behaviour
- inconsistency occurs because people behave in ways they think will lead to reinforcement in the situation at hand (in other words, situational factors play a significant role in controlling behaviour)
- overdependence on animal research?

---

**O'Donnell, J. & Brown, M. (1973). *The Classical Conditioning of Attitudes: A comparative study of ages 8 to 18*. Journal of Personality and Social Psychology, 26(3), 379-385.**

- attitudes formed readily during early years of development
- origin of attitudes has been attributed to “ready-made attitudes” of parents, teachers or playmates
- been suggested that classical conditioning processes underlie much of this phenomenon of attitude formation & attitudes are formed without awareness (unconscious/automatic)
- some studies = no evidence to suggest that awareness constitutes a necessary factor for the classical conditioning of attitudes
- increasing age was accompanied by an increase in conditioning scores
- may have been due to increased awareness in the older subjects
- attitude conditioning and awareness are correlated
- contingency awareness is more crucial to the prediction of conditioning than demand awareness
- subjects can be contingency aware and still be unsuspecting about the experimental purpose
- conditioning increases both as a function of age and awareness

---

**Dragoi, V. & Staddon, J. (1999). *The Dynamics of Operant Conditioning*. *Psychological Review*, 106(1), 20-61.**

- dynamic theories specify how operant behaviour is shaped by reinforcement in real time (or response by response)
- local (short term) dynamic theories of OC predict that behaviour is determined by events (responses and reinforcements) in the recent past
- operant conditioning is often history dependent: the same set of experimental conditions leads to different performances depending on earlier conditions
- expectancy difference drives the operant response: if short term expectancy is greater than long-term expectancy (reinforcement is underpredicted), the strength of the operant response increases (behavioural excitation).
  - If short term expectancy is less than long-term expectancy (reinforcement is overpredicted), the strength of the Operant response decreases (behavioural inhibition)
  - Consolidated long term memory
- Delayed Reinforcement – both operant and classical data show that if the reinforcement (or UC) is delayed, performance is usually disrupted.
- Animals prefer the alternative associated with a shorter delay of reinforcement
- Hypothesized that the process of conditioning involves the formation of associations between competing operant responses (and environmental stimuli) and the reinforcement.

---

**Downing, J., Keating, T. & Bennett, C. (2005). *Effective Reinforcement Techniques in Elementary Physical Education: The key to behaviour management*. *The Physical Educator*, 62(3), 114-122.**

- Ability to shape appropriate behaviour while extinguishing misbehaviour is critical to teaching and learning in physical education
  - scientific principles that affect student learning in the gym also apply to the methods teachers use to influence social behaviours
  - research indicates that reinforcement strategies are more effective than punishing strategies for increasing and shaping positive behaviours in any learning environment, and such strategies tend to positively affect task performance and intrinsic motivation
  - decrease misbehaviours in PE classes while conversely increasing available instruction time
  - research has indicated that the implementation of exemplary behaviour modification and management techniques in any educational environment generally contribute to effective teaching, proactive learning and enhanced pupil motivation
  - teachers who fail to integrate this spend much time on classroom management and often leave the profession due to burn out
  - reinforcement can both shape the teaching of a new skill and encourage its use; while punishment is usually ineffective as a teaching tool
-

- EX- reinforcing procedures can teach students to make positive statements to peers, try harder in cooperative or competitive play, or stay on-task when engaging in a least favourite activity
- Punishing behaviours will not teach these proactive behaviours (only teach students what to avoid)
- Punishment will not effect long lasting changes in student behaviour – reinforcement will
- Reinforcement procedures = positive feelings; punishment = negative feelings
- When students learn that pleasant consequences occur after particular actions, they are more likely to repeat these actions
- This implies that teachers should provide their students with feedback that will motivate them to engage in behaviours considered desirable
- Use reinforcement in daily interactions with students in and out of the gym, providing them with feedback about their skill improvement and behaviours
- Set up a preplanned, structured reinforcement system
- When a student is misbehaving, communicate what you want the student to be doing by praising a student who is on-task and behaving appropriately (especially if the students are in close proximity)
- Systematically ignore misbehaviour that doesn't interfere with teaching/learning & never show anger
- When misbehaving student begins to behave, reinforce that positive behaviour
- 3 categories of reinforcement – social, activity and tangible
- Social= attention student gets from teacher
- Activity= activities children are permitted to engage in as a reward for good behaviour
- Tangible – physical objects presented as reward (candy, chocolate, etc)
- Any use of reinforcement procedures must be highly contingent on demonstration of appropriate behaviours
- Nothing can damage the value of reinforcement faster than reinforcing students who have not put forth genuine effort → and BE SINCERE
- reinforce improvement and success
- each individual in the class should receive reinforcement from the teacher (and positive interactions with teacher)

---

**Chevalier, R. (2008). *A Brief History of Performance Improvement*. *Performance Improvement*, 47(6), 5-11.**

---

- Skinner: in his own words...
  - The consequences of an act affect the probability of its occurring again
  - The way positive reinforcement is carried out is more important than the amount
  - Give me a child and I'll shape him into anything
  - - Behaviourism explains behaviour as a response to external stimuli
-

**Bush, G. (2006). *Learning about Learning: From theories to trends*. *Teacher Librarian*, 34(2), 14-18.**

- Behaviourism → underlying assumptions included the beliefs that all learners gain the same understanding and that all students can learn given appropriate environmental influences.
  - limitations on the explanations of changed behaviour
  - offers a foundation for the study of adaptability of human behaviour which supports the tenet that all students have potential
  - educational research continues to support immediate positive reinforcement that is fully explained to students so that they might learn how to improve (ie. stickers, classroom coupons, motivational stamps etc)
  - Ralph Tyler (1949) contributions include the now-ubiquitous style of writing lesson objectives in the manner of student behaviours (ie In this lesson, students will...)
- 

**Dad, H., Ali, R., Janjua, M., Shahzad, S. & Khan, M. (2010). *Comparison of the Frequency and Effectiveness of Positive and Negative Reinforcement Practices in Schools*. *Contemporary Issues in Education Research*, 3(1), 127-135.**

- Skinner views operant conditioning as a form of learning in which the consequences of behaviour lead to changes in the probability of that behaviour's occurrence
  - \*\*\*\*definition of positive reinforcement and negative reinforcement \*\*\*
  - punishment is a means of suppressing behaviour by either presentation of something negative or removal of something positive
  - 1. Once begun, punishment must continue to remain effective (when removed, behaviour soars to a level higher than before)
  - 2. The more severe the punishment, the more behaviour is suppressed
  - 3. The sooner the punishment follows undesirable behaviour, more effective
  - 4. Once delivered, punishment must be the same for each instance of misbehaviour.
  - 5. Punishment can condition fear to all stimuli present when punishment is delivered
  - can produce undesirable side effects : anger, resentment and aggression
  - punishment alone is rarely sufficient – need to supplement with positive reinforcement to teach correct behaviour
- 

**Zimmerman, B. (1989). *A Social Cognitive View of Self-Regulated Academic Learning*. *Journal of Educational Psychology*, 81(3), 329-339.**

- Students can be described as self-regulated to the degree that they are metacognitively, motivationally and behaviourally active participants in their own learning process

- Such students personally initiate and direct their own efforts to acquire knowledge and skill rather than relying on teachers, parents or other agents of instruction
- Students learning must involve the use of specified strategies to achieve academic goals on the basis of self-efficacy perceptions (this assumes they must have 1-self regulated learning strategies, 2-self efficacy perceptions of performance skill, and 3-commitment to academic goals)
- SRL includes methods of organizing and transforming information, self-consequating, seeking info and rehearsing or using memory aids
- Self-Efficacy = perceptions about one's capabilities to organize and implement actions necessary to attain designated performance of skill for specific tasks
- **Self regulation - a motivational orientation by learners that is sustained by continuing self-perceptions of efficacy when performing a specific task**
- Reciprocal causation among three influence processes (personal, environmental and behavioural determinants)
- SRL is not determined merely by personal processes; these processes are assumed to be influenced by environmental and behavioural events in reciprocal fashion
- "Behaviour is, therefore, a product of both self-generated and external sources of influence"
- Bandura assumed that relative strength among personal, environmental and behavioural influences can be altered through 1- personal efforts to self regulate, 2- outcomes of behavioural performance, 3- changes in environmental context
- self efficacy found to be related to two key aspects of reciprocal feedback loop (students use of learning strategies and self monitoring)
- student behavioural performance is assumed to influence their perceptions of self-efficacy

---

**Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of child development. Vol.6. Six theories of child development (pp. 1-60). Greenwich, CT: JAI Press.**

- **SCT**- favours model of triadic reciprocal determinism → behaviour, cognition and other personal factors & environment issues influence each other bi-directionally → some may be stronger than others
- **Because of the bi-directionality of influence between behaviour and environmental circumstances, people are both products and producers of their environment.**
- Throughout their actions people create and select environments – aggressive people will produce hostile environments wherever they go
- **Observational learning** – modeling can have diverse psychological effects.
- Modelling: foster acquisition of new competencies, skills or behaviour patterns; they affect level of motivation over behaviour that has been previously learned; social prompts that channel behaviour in social transactions; express emotional reactions that tend to elicit emotional arousal in observers
- In sum = models = motivators, instructors, inhibitors, social facilitators, emotion arousers



- --- behaviour patterns that produce positive outcomes are readily adopted and used, whereas negative....
- People influence their own motivation and behaviour by the positive and negative consequences they produce for themselves (self regulation)
- In SCT, learning from the effects of actions is a special case of observational learning.
- In learning by direct experience, people construct conceptions of behaviour from observing the effects of their actions; in learning by modeling, they derive the conceptions from observing the structure of the behaviour being modeled

---

## IMPLICATIONS

In phys ed – give 10 minutes “Free play” at end of period for those who were on time  
 → if late, free play time is taken away, and must spend that time doing fitness exercises teacher has set out.

- involves both presentation punishment and removal punishment to reduce the likelihood of being late

- also could involve classical conditioning as students begin to associate the bell with not being late or else they will have free time taken away....

→ Bell ringing = classical conditioning (ie. GET TO CLASS)

--- classical conditioning also used with blowing whistle to mean no balls bouncing, no talking no moving → just stand and listen.

----response generalization could occur if I forget my whistle, and whistle with mouth loudly, students will also begin to associate this sound with stopping what they are doing

- Positive reinforcement – have class list chart with all names on it → when I see student putting exceptional effort into class activities, or helping another student to learn a skill or perform a task, they will get a star beside their name. When they get 5 stars, they get to choose a game/activity that we will do as a class the next day, when they get 10 stars they can ...