

# Flow

Semester 5 DSE A

# Challenge-Skill Balance

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Tasks that lead to flow experience demand that -

- We use our skills almost to their limits
- The tasks are finishable
- For example- finishing reading or writing a piece of prose, completing a piece of music, or finishing a game.
- The ratio of challenge and skill for an activity is close to 1:1

# Flow and other states related to skill & challenge

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Low challenge / low Skill- Apathy, Boredom,

Low skill / High challenge- Worry, anxiety, Arousal

High Challenge/ High skill- Flow, Control,

High skill/ Low Challenge- Relaxation, Boredom.

# Goals & Feedback

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Flow Experience tasks have clear and not vague goals

Feedback about progress towards such goals is immediate and not delayed

For example - in all sports feedback is immediate, the competitor knows from a moment -to- moment basis if they are winning or losing.

Such feedback is used for corrective action by using well-developed automatic skills.

# Concentration & Lack of Self-awareness

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Flow tasks require a deep level of concentration leading to a loss of awareness about the self.

People become one with the task of engagement.

For eg. the singer becomes the song, the dancer becomes the dance.

Lapses in concentration or diversion into self-criticism can erase the flow experience and the quality of skilled task performance.

# Transformation of time

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During the flow experience our perception of time is distorted. Hours can pass in what seem minutes.

For example when we are reading a good book or watching a webseries.

The experience of elapsed time is condensed.

In other flow experiences the experience of elapsed time is extended.

For example, executing rapid skilled manoeuvres in competitive sailing might happen in seconds, but during flow experience it might seem to happen in slow motion.

# Autotelic tasks & Autotelic Personality

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Activities that lead to flow experiences become an end in themselves or autotelic.

Autotelic comes from the greek word *Auto- self* and *telos - goal*,

*Such activities are not done to anticipate some future benefit but because the activity itself is intrinsically rewarding.*

*Writers write not for their occupation but because they enjoy writing.*

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While most people experience flow, there is variability in in the frequency and intensity of flow experiences reported.

***Autotelic personality***- are characterised by the tendency to do things for their own sake rather than for the expected outcome. They have meta-skills including curiosity, persistence and low self-centeredness, that enable them to enter and maintain flow states with relative ease.

Such meta-skills underpin intrinsic motivation to engage in novel tasks and persist in mastering them.



**Activities that lead to flow**

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- Different kinds of sports
- Social activism
- Creative writing
- Aesthetic experience
- Scholarship
- Variety of computer-based activities [ video games]
- In all of these activities flow leads to enhanced performance.

# Computers & Flow

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Flow can occur for a range of activities using the computer

Writing,

Corresponding by email

Searching for information

Playing games

Online shopping

# Telepresence

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It is the extent to which we feel present in a computer-mediated environment, rather than the immediate physical environment.

Certain features of computer-mediated environment facilitate the flow experience, such as

The match between our skills and the challenges posed by the computer-mediated environment

The vividness

Speed

Interactivity

Attractiveness of the environment.

However such flow is not always positive - might lead to internet addiction.

# How to create flow in physical activities

# Swimming, Running etc

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- Set an overall goal and break this down into a number of subgoals
- Decide on the way of measuring progress towards the goals
- Notice the progress towards the subgoals and concentrate on the task at hand.
- Gradually increase the complexity of the subgoals you are aiming for.

# Flow in Families

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Families characterised by optimal levels of ***clarity, centring, choice, commitment & challenge*** can provide more flow experiences.

***Clarity***- Goals and feedback were unambiguous and children clearly knew what was expected of them

In optimal ***centring*** settings, children knew that their parents are interested in what they are doing and experiencing in the present and were not preoccupied with their future outcomes.

In families with optimal levels of ***choice***, knew they had a certain measure of choice over how they behaved including breaking parental rules. Also, different choices had different consequences.

***Commitment*** - Children feel that they can safely and unselfconsciously get involved in their pursuits of interest without fear of being judged negatively, criticised or humiliated. They had high levels of trust in their parents.

***Challenge***: Parents are dedicated to provide children with adequate opportunities for exercising their skills.

# Flow in Intimate Relationships



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Intimate relationships are initially pleasurable and satisfying , however with time might deteriorate to boredom.

To retain their vitality over time, intimate relationships need nurturance in physical and psychological aspects both. [ By caring deeply for our partners as companions, by sharing valued interests, hopes and dreams with them, embarking on adventures with them and facing all of life's chaos and stress with them.

# Flow & Education

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For both primary and secondary schools certain pedagogical approaches facilitate flow experiences & lead to better academic & behavioural outcomes for pupils through the dual processes of

- Making learning enjoyable
- Making learning academically challenging matching with the skills of the child.
- Active encouragement to engage in individual and group learning activities
- Promoting the development of intrinsic motivation
- A collaborative teaching-learning ethos
- Provision of support and scaffolding during skill acquisition, being sensitive to the current level of skill development.

# Flow at Work

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In occupational contexts flow occurs when workers have adequate control over their jobs.

Have clear goals and unambiguous feedback

Skill- challenge balance

“The paradox of work” - flow experienced more frequently at work, happiness is more common during leisure-time.

# Neurobiology of Flow

Dietrich's [2004] Hypofrontality theory-

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Flow may coincide with increased activation of basal ganglia, which subserves implicit cognitive processes that are effortless and autonomic. And diminished activation of the prefrontal cortex.

Structures in the medial temporal lobe, which subserve explicit cognitive processes that demand deliberate control, effort and awareness,

# Weber's synchronisation of attentional and reward networks theory

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weber [2009]

Flow experiences happen due to synchronisation of attentional and reward neural networks.

The reward network includes the dopaminergic system, the orbitofrontal cortex, ventromedial and dorsolateral regions of the PFC, the thalamus and the striatum.

The attentional network involves frontal and parietal cortical regions which subserve alertness, and superior and inferior parietal lobe regions which subserve orienting.

Acc to Weber, these attentional and reward networks fire at a synchronous rate during flow.