Session 2: (Flow)

Please sit with your group.

If you look at the row numbers in this room, you should find a row with the same number as your group.

(You can move after some discussion of the "homework".)

L4 Positive psychology
Steve Draper

21 Jan 2016

http://www.psy.gla.ac.uk/~steve/fun.html

1

Positions for groups to meet: row numbers

Front, Tables, Presenter.		
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
……	……	……

2

Wiki critiquing exercise:

Discussion

3

Wiki critiquing exercise

You were asked to read one or more of the topics from earlier PosPsy courses, and critique them by the standards laid down for it, and for your own group wiki page: mainly, how useful it is to fellow students.

The point is to get you thinking about this kind of writing, consulting your own wishes as a reader, in preparation for your own coursework.
This kind of writing is not particularly hard to do in the end, but it takes an effort to switch your writing skills at first.

Think about what you personally take from this exercise to apply to your own group's wiki.

4

Overall Plan for discussion

A. Move to your main coursework wiki group.

B. Discuss what lessons you learned.
   Do this for each page you critiqued (discuss them in turn).

C. Plenary: We'll go round some groups asking about conclusions.

D. Type up your own conclusions and send to your group's private forum as a reminder, and/or for further discussion.

5

Plenary

What do you personally take from this exercise to apply to your own group's wiki?

6

Homework 1

Type up your own conclusions and send to your group's private forum as a reminder, and/or for further discussion.

7

Session 2: (Flow)

(You can move after some discussion of the "homework".)

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8

Lecture topics, announcements

This week (session 2), the lecture topic will be mainly Flow.

Next week (session 3), we have a guest speaker on the topic of "mHealth": Claire McCallum, a former psych student, now doing a PhD here at GU in the area of mHealth.

The last week (session 5), we have a guest speaker on the topic of Mindfulness (meditation): Rohan Gunatillake.
        It might be good if you looked up something on mindfulness in advance of that e.g. the student wiki page on mindfulness in 2014.

9

Who does the L4 option Consciousness course?

Why do you think that consciousness is (or is not?) an important topic in psychology (as opposed to in philosophy)?
In 10 min.s or so, I'll ask if students from that course can give us an opinion about this.

Stefania, Jacob, Kirsty?

Alert for students who will talk about this later

10

Evaluation of well-being:
A problem in measuring well-being:
Whether un-consciousness is a sign of well-being

Siobhan Lynch's evaluation on students who had done a mindfulness training course.

Healing over,
Forgetting you had a problem,
Forgetting when and where you learn anything.

*This is an aside, but it relates to awareness vs. importance in your life.
And is a Critical Thinking point for consideration when looking at any eval. in any PosPsy expt.*

11

Recap: nature of this course

Get a sense of what PosPsy is

Of what happiness and/or well-being might be

Learn in depth by reading papers from the literature

And develop the ability to discuss PosPsy as a whole, and individual topics, critically

Select topics, aided by using other students' group wiki pages

And develop a sense, and skill, for how to create such a page that is as useful as possible.

The wiki critiquing homework was to start you learning to judge this new sense of usefulness.

12

Consciousness

Brief (1 min.) talk by students about why they think consciousness is (or isn't) an important concept and topic in psychology.

And whether being conscious of something is a sign of well-being, or its opposite.

Lead in to Flow, which is an account of consciousness.

13

Flow

Complete absorption in what you are doing

14

Mihály Csikszentmihályi (1934-)

His (PosPsy) basic question was:

(not: "When are people unhappiest?" but ...)

"When do people experience most happiness / satisfaction with life; and what characterises these times?"

He used two methods:
- Random time sampling
- Interviews

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Mihály Csikszentmihályi (1934-)

1975 Investigation (from "Beyond boredom and anxiety: Flow") had Csikszentmihalyi interview people from different professions.

And see how they felt, acted and thought throughout their work day.

Interestingly, They experienced very similar effects at the most engaging part of their job.

16

What is "Flow"?

Csikszentmihalyi, M. (1990) Flow: the psychology of optimal experience (New York: Harper & Row)

[Hereafter Mihály Csíkszentmihályi (who is Hungarian) will be referred to on my slides as "MC"]

An attempt to describe the mental state which humans most value. Being fully absorbed in an activity.

"Flow" is a metaphor from an interview participant.
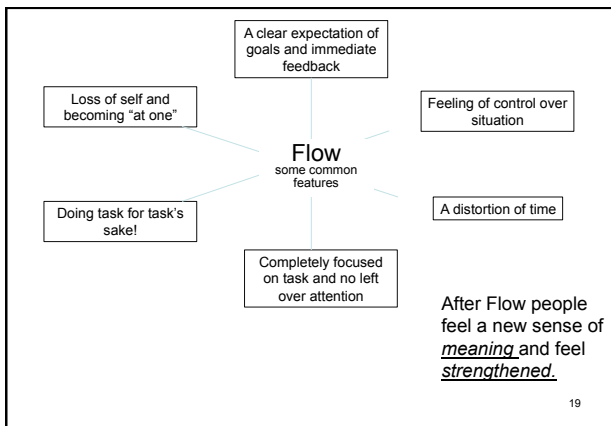"Autotelic experience" is a technical term meaning roughly "intrinsically motivated".

First study interviewed sculptors immersed in sculpting.

17

Positive Psychology

flow

Flow

a state of consciousness where attention is undivided and motivates action to fulfil the goal of expressing self. This means being fully immersed in the task at hand.

18

Slide 19

A clear expectation of goals and immediate feedback

Loss of self and becoming "at one"

Feeling of control over situation

Flow
some common features

Doing task for task's sake!

A distortion of time

Completely focused on task and no left over attention

After Flow people feel a new sense of *meaning* and feel *strengthened.*

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Slide 20

Microflow Activities

- Social: unnecessary talking and joking with other people, browsing shops, visiting galleries, sexual activity.

- Kinesthetic: involves all those activities that involve primarily body movements e.g. touching, fiddling with objects, walking, pacing, running and any games or physical activities engaged in alone.

- Imagining: daydreaming, humming, singing, playing music in one's head.

- Attending: all the passive forms of spectatorship such as reading a book, watching people walk down the street, watching television.

- Creative and oral areas were also identified.

20

Csikszentmihalyi, M. (2000) *Beyond boredom and anxiety.* Jossey-Bass.

Slide 21

(In connection with: what is positive psychology?)

By the end of this course, you should be able to summarise your own brief view on what PosPsy is; and on the relationship of:

- Pleasure. Direct sensation

- Joy. The emotion of self-efficacy, following plan success.

- Happiness. Plus "values" or "meaning".

- Well-being. ??

MC's flow among other things definitely concerns the engagement of a person's highest values, and so meaningfulness (to them) of the activity.

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Slide 22

My personal analysis of flow

What follows is not what's published, but my own thinking.

I would define flow as the state (w.r.t. a task) of always being confident about what to do next: never being stumped for a suggestion, nor worried about having to choose between several and avoid the bad ones.

Flow is close to play:
    You know what you will do next, you are interested in what happens but don't know what it will be and do want to find out.

There are several aspects to flow:
1. One is the balance between <u>having too many vs. too few possibilities </u>for your next action. [Burden of Choice]
2. Another is the balance between the activity requiring <u>too many vs. too few mental resources/effort</u>.
3. Another is how <u>important</u> the activity <u>is to the person's values</u>.

Slide 23

**The burden of choice (1-slide version):
too many / too few alternatives.**

Barry Schwartz argues, on the basis of some empirical work, that people enjoy choice more with only a few alternatives. More choice is NOT generally good.
Schwartz et al. (2002) "Maximizing Versus Satisficing" J.Pers and Soc Psy 83 (5) 1178-1197

(See the wiki on this from the 2009-10 course.)

Certainly, although making a choice makes us feel in control (self-efficacy), it is mental work. And also, it tends to make us **more** worried about whether we made the right choice.
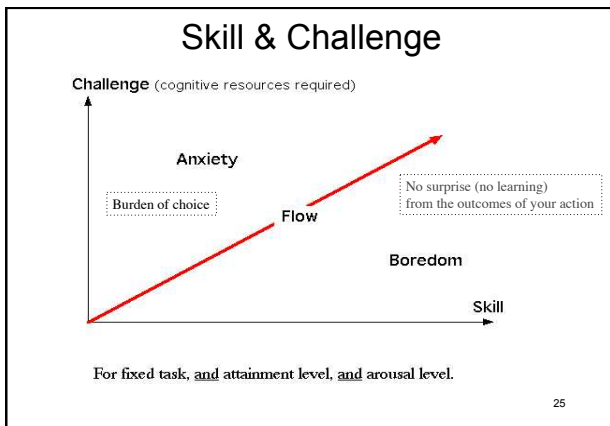
Two types of strategy: Maximisers, Satisficers.

Flow however seems to correspond to having no doubts about the one choice to make.

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Slide 24

Performance & Arousal
(Yerkes-Dodson law)

1. For fixed task, and attainment, what arousal is optimal?
2. For a given arousal level, what task matches?

24

Skill & Challenge

Challenge (cognitive resources required)

Anxiety

Burden of choice

No surprise (no learning) from the outcomes of your action

Flow

Boredom

Skill

For fixed task, and attainment level, and arousal level.

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Flow: 'Passive' vs. 'Active'

Passive
Little effort required
e.g. Watching TV

Active
More effort required
e.g. Sport, reading, painting

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Three of four types of flow

U-flow [unconscious]   Body engrossed (fully occupied)
   You walk to work, using your eyes, but thinking of other things.

C-flow [conscious]   Body and mind engrossed.
   Your consciousness is fully focussed on the activity.

MC-flow [plus values, optimal]   Body & mind & "values" engrossed;
   and have no more valuable aim in life.

Meta-flow   When your learning, but not your doing, flows effortlessly.
   As when you look round a corner, you don't resent the physical effort,
   but enjoy making sure you are not missing any information.

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Human-Machine Interface design

Designing computer games, or computer-human interfaces: flow is a
   good description of the criterion of good design.

However, the aim is u-flow for the controls, allowing c-flow for the work
   itself. I.e. you do want full engagement; but for the engagement not
   to be about how to make the machine work, but about the writing or
   drawing or accountancy or human communication that is the purpose
   of using the machine in the first place: "transparency" of the
   machine. "Direct manipulation"

We know some of the features that are required:
• Instant perceptible feedback on every action
• Undo (so you don't have to plan ahead and worry)

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Organisation of human action

Surprisingly, in many many cases, humans do NOT adopt fixed action
   sequences for highly practised tasks. They use perception-action
   rules, and practised activity is typically flow-like.

The notion of flow thus also describes something about much well-
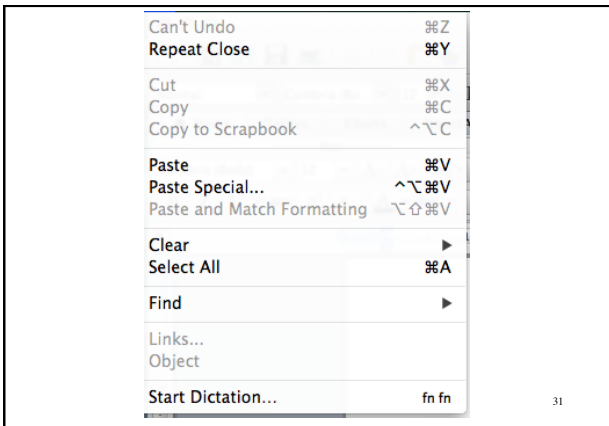   learned behaviour.

This is consistent with some psychology theories (Anderson's ACT-R
   and ACT-* theories).
But equally shows we do NOT learn many things we are nevertheless
   repeatedly exposed to and indeed engaged with: we just re-perceive,
   re-decide each time.

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Exercise

1. Draw, without peeking at your neighbour's attempts, a sketch of
the Boyd Orr building as you approach it from the QM side.

2. Picture to yourself the "Edit" menu in WORD. List the commands
on that menu in order.

30

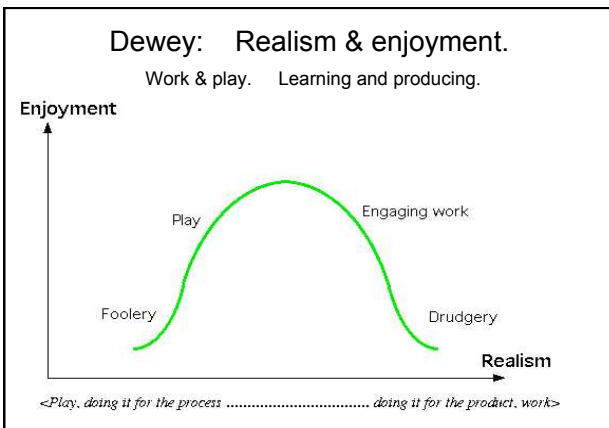| Can't Undo | ⌘Z |
Repeat Close	⌘Y
Cut	⌘X
Copy	⌘C
Copy to Scrapbook	^⌥C
Paste	⌘V
Paste Special...	^⌥⌘V
Paste and Match Formatting	⌥⇧⌘V
Clear	▶
Select All	⌘A
Find	▶
Links...	
Object	
Start Dictation...	fn fn

31

Emotion, consciousness, awareness

Flow states are valued, sought after, but are states of no emotion
(at least in the sense that you are not thinking "I'm having a great time" but are immersed in the task until you pause).

The person is conscious of the task, but oblivious of everything else: so it is a state of low awareness in most senses, but high momentary awareness of the task.

It is a state of zero reflection; or rather:
In flow, you aren't reflecting on the problem of how to do the task.
But reflection itself (on past events) may <u>be</u> the task.

It is a state of no pre-planning, just going with the flow.

It is probably true that there is always significant learning going on in flow; but that other important kinds of learning can be done without it.

Dewey: Realism & enjoyment.

Work & play.   Learning and producing.

Enjoyment

Play

Foolery

Engaging work

Drudgery

Realism

<Play, doing it for the process .... doing it for the product, work>

"Realism": play vs. useful physical work

In the previous diagram of Dewey's concept, flow probably corresponds to the <u>mid-point</u> on the "realism" axis (play — work; silliness — realism); but the <u>high point</u> of enjoyment.

But for MC flow (if not for other kinds of flow), flow is not only intensely enjoyable but is also intensely serious and valued.

So: there are two distinct human values emerging here, both of which may support flow: "work" and "play".
I suggest that work corresponds to producing material effects of value; and play produces informative (knowledge, learning) effects.

Thus the graph may even imply that optimal experiences manage to fulfill both values in one activity.

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Learning vs. doing as the goal of an action

Dewey's "realism" is about play   vs.   work (adult-valued activity).
But a fuller view of this dimension is the contrast between:
  Acting-to-learn-by-seeing-what-happens vs. Acting-to-be-productive-in-the-world
Or: Learning vs. Doing or producing.

(These are individual values, and the diagram shows Dewey's awareness that both are separately valued by school pupils; but the word "work" indicates that he was thinking of social not individual values, and so of physical work valued by adults (and children) rather than of either research or individual learning as of value.)

This duality of learning and producing is very general; all human actions in fact produce both as effects, but usually we do an action to achieve just one or the other. I.e. in most cases, one is the intended effect and the other an incidental side-effect.

Flow may often occur when either one or the other is personally valued and fulfilled in the activity; but perhaps optimal experience involves both simultaneously.

Certainly creative artists seem to be both learning (finding novel effects) and producing a "work" that others value.   35
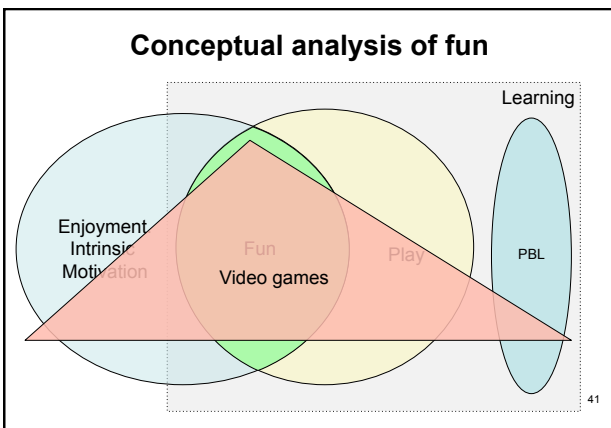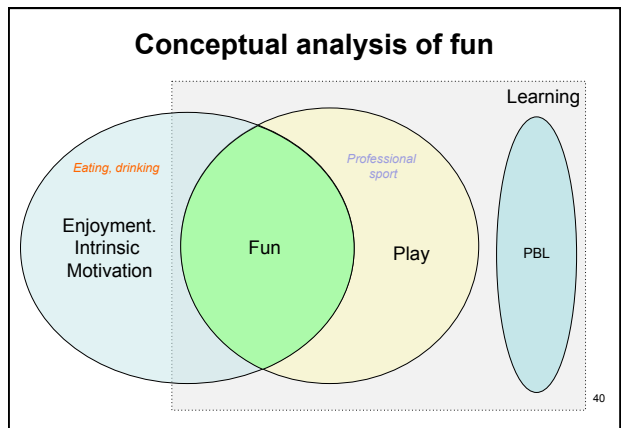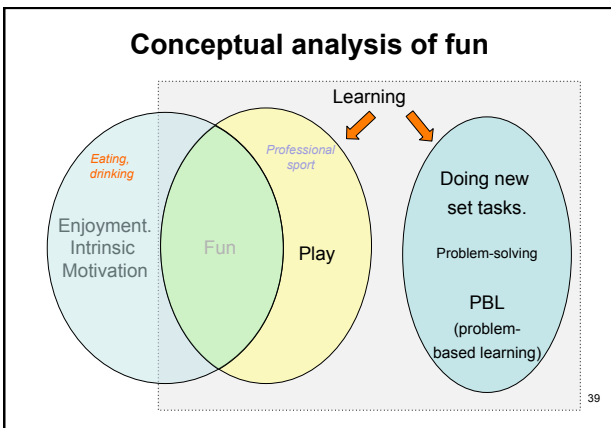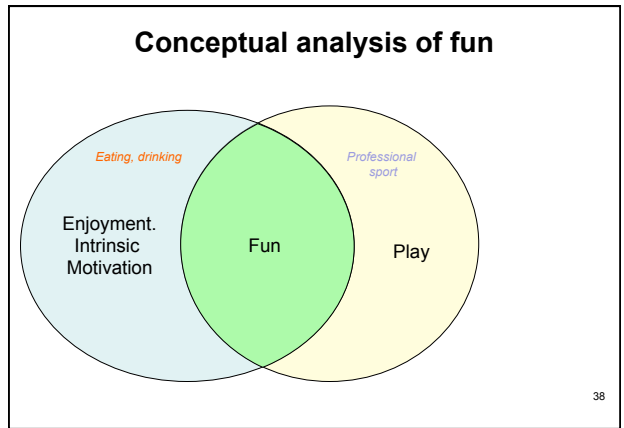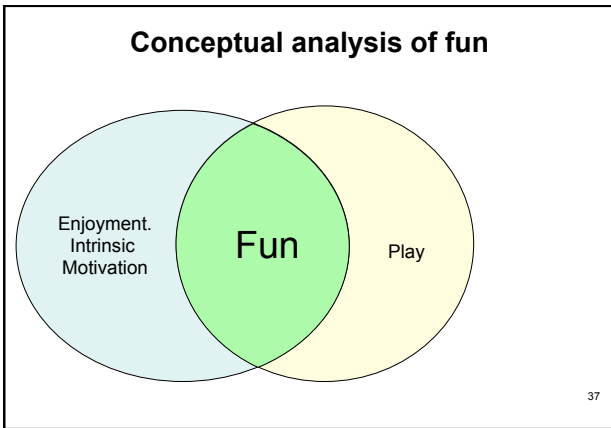

Fun

A side-issue, or related topic, is what to make of the concept of "fun".
(Of course, just because we use the word and the idea frequently does not necessarily mean it is a serious concept with any definable academic meaning.)
Fun is clearly related to play; which in turn is related to learning.
I have a rough paper on the concept (link from the course web page).

<u>Fun = enjoyable play:</u>
o Enjoyable = to satisfy some intrinsic motivation
        (although fun can have "work" motivations in addition).
o Play = an activity which is both:
    ➤ a) Defined by a process rather than a goal (a pre-defined outcome).
    ➤ b) Undertaken to discover what the outcome will be.
    Play always results in learning (but is often undertaken for other purposes).
    Learning, in contrast, often does not involve play.
o Computer games: Enjoyment is the main aim of computer games; but fun is only one kind of enjoyment, so game design may use other kinds as well.   36

Conceptual analysis of fun

Enjoyment. Intrinsic Motivation

Fun

Play

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Conceptual analysis of fun

Eating, drinking

Professional sport

Enjoyment. Intrinsic Motivation

Fun

Play

38

Conceptual analysis of fun

Learning

Eating, drinking

Professional sport

Enjoyment. Intrinsic Motivation

Fun

Play

Doing new set tasks.

Problem-solving

PBL
(problem-based learning)

39

Conceptual analysis of fun

Learning

Eating, drinking

Professional sport

Enjoyment. Intrinsic Motivation

Fun

Play

PBL

40

Conceptual analysis of fun

Learning

Enjoyment Intrinsic Motivation

Fun

Video games

Play

PBL

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Video Games

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Video games

- 32% of all adults (34% of men, 31% of women) in the UK describe themselves as 'gamers' (Interactive Software Federation of Europe)

- One child in two plays games every day (ISFE, 2010)

- 2011's *Call of Duty: Modern Warfare 3* out-grossed the last four *Harry Potter* films combined (GFK Chart-Track, 2011)

- The average age of a gamer is estimated to be somewhere in the mid-thirties, with the Entertainment Software Association placing the current figure at 37.

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Video games consist of learning tasks

- Best-designed games typically comprise a series of **coinciding or intersecting goals**, with **short-, medium- and long-term conclusions**

- This arrangement of goals, which **permits the student player to progress on a number of fronts** – even when one goal is seemingly out of reach – has some significant advantages for **student engagement**

- More difficult to implement in a structured, often didactic, educational environment such as a school or university?

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"Meta-flow"

A different kind of flow is the type that may be experienced when learning, not doing (or scoring) is the real goal.

When you are trying to get a job done, maximise your score, then impasses drop you out of flow, make you frustrated.

But when the real goal is puzzle solving, then flow is at one higher level: you may frequently be halted in the task, but always know an action that will get you some relevant information to move you on.

I call this "meta-flow"; and it seems a relevant concept because when people want to learn then they don't get frustrated because no-one just tells them the answer. On the contrary ....

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My analysis of VideoGames

Their appeal has an overall driving motive of intrinsic love of discovering (learning) the rules for their own sake.

The chief learning method is play (trying things out);
but may involve other learning methods at times.

There may be additional rewards sometimes, both intrinsic and extrinsic e.g. playing for money, or fame (the latter is a social satisfaction); the visual pleasures so many games spend lavishly on creating.

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Summary of (possible) dimensions underlying flow

The phenomena connected to flow concern more than the 2 dimensions that fit conveniently into one simple diagram.
I've mentioned these dimensions in earlier graphs:

1. Enjoyment. In many diagrams this is the invisible 3rd dimension
2. Skills (of the person w.r.t. the challenge or task)
3. Arousal level
4. Challenge / difficulty (for the person at that stage of learning)
5. Realism: utility in the practical world e.g. aircraft simulations
6. Meaning / value (of the task or activity to the person)

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The dimensions underlying flow 1

Reorganising into an outline argument the dimensions brought up so far, the basic points seem to be:

A. It looks as if the greatest enjoyment is where learning and doing are both equally the aim: 2 not 1 sources of value.
The peak of flow is where skill and "challenge" are balanced, and double meaningfulness is possible (both learning and accomplishment in one activity).

B. Challenge is a function of:
   1. The inherent difficulty of the task (golf handicap; "levels" in Vgames)
   2. The skill of the person relative to (1)
   3. The person's arousal level, and its degree of match to (1,2).

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The dimensions underlying flow 2

C. Challenge vs. skill has a saddleback or ridge shape: enjoyment and flow peak where challenge and skill meet and balance.

D. When challenge and skill balance, then flow; but it may be u-flow not MC-flow.

E. You get MC-flow when values (meaningfulness) are also at a peak, including:
   1) Value to the person from learning
   2) Value to the person from doing (from the product)
   3) Value to others: social value.

F. Dewey's "realism" refers in part to how well linked the task is to the real as opposed the simulated world. If it is, then (2, 3) are likely to be higher. For example, if the "game" is a simulation of flying an aircraft vs. of an alien world.

A note on consciousness and psychology

Today it is rare for "consciousness" to play a central role in theory. However it did / does in:
• Freud
• Soviet Activity Theory [Leonteev; a disciple of Vygotsky's]
• Flow.

All self-report depends upon what we have conscious access to, but researchers are generally alert to this issue, and the tension between our behaviour and what we say about it e.g. in IAT and issues of when our self-reported attitudes are consistent with our implicit attitudes.

In practice, although not much discussed, there may be 3 categories:
• What we always can be aware of
• What we can never be aware of introspectively
• And the large amount of detail we are momentarily aware of but forget forever if we aren't asked to speak about it immediately.

50

The burden of choice (6-slide version)

Schwartz B, Ward A, Monterosso J, Lyubomirsky S, White K, and Lehman,D.R. (2002)
"Maximizing Versus Satisficing: Happiness Is a Matter of Choice"
Journal of Personality and Social Psychology
Vol.83 No.5 pp.1178–1197

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The burden of choice 1

Claim 1: Having more choice can make people less happy

When purchasing exotic jams or chocolates, both purchase and post-purchase satisfaction is more likely with 6 choices than with 24. Iyengar & Lepper 1999,2000

Same is true of students with 6 rather than 30 essay titles to choose from.

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The burden of choice 2

Claim 2: There are two types of decision procedure anyone might use (but there are individual differences in which one s/he most often uses)
a) Maximiser: work on the choice until you are sure you have identified and selected the optimal choice
b) "Satisficer": have an internal threshold of "good enough" for the decision and pick any choice (e.g. the first) that meets it.

The more a person is a maximiser (seen as a trait), the more likely they are to suffer regret, upward social comparison, be dissatisfied with consumer decisions. (Schwartz et al. 2002)

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Why is this a problem (1)

The other problem (than boredom) when you don't have flow is too much choice, and you don't know how to make it.

Flow is the sweet ~~spot~~ line between
a) having no choice and being stuck (zero options you can see), and
b) having to choose without knowing which is best (more than one option AND no reliable decision procedure).

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Why is this a problem? (2)

Making a decision costs significant time and effort.

If we try to maximise (make the optimum choice) but there are a lot of alternatives, this is a lot of work; requires a lot of information; and we may not be able to get the information.
And so we may not have confidence we were able to pick the best and so remain dissatisfied with our task of deciding.

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Remedy 1

Make the decision carefully, then use it again and again.
(Brand loyalty)

Many people like to make a choice once and stick to it (a favourite brand, partner, degree subject, holiday destination, …).

This saves major mental work, but puts even more stress on getting the original decision right; and is depressing when the favourite is withdrawn from the market thus destroying the intellectual (and affection) capital invested.

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Remedy 2

Satisfice, don't maximise
Abandon getting it right, just get it good enough

Remedy 3: realise that satisficing is best (!)
It saves mental effort. If you added in the cost of the decision time, that would change the one you picked.
Choosing costs mental effort. (Supermarkets make you pay for this.)

You usually don't know enough to optimise exactly anyway: satisficing is realistic about the value attainable from trying to optimise.

You make and live with many other irreversible decisions anyway; we are where we are; …… There is something irrational in continuing to be unhappy about a decision that's taken.

Learn more about the real criteria; and the real options.

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How many choices is best?

Learned helplessness: we know that having no effective choices to fulfil a goal you can't forget is bad.
Schwartz shows that more consumer choices is often worse than fewer choices.

Flow however suggests that what we most like is having to know what the best choice is instantly at every moment: even if there is only one choice.

In fact a lot of this is not about the number of choices, but about having the information and knowledge to make the choice.
And also about whether or not we are happy to proceed under uncertainty and value what we then learn.

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Homework for next time

Individually do the Strengths questionnaire, and come with a note on what it says your own strengths are.
http://www.viacharacter.org/www/   VIA website

Homework:
1. Type up a note on what you took from the wiki critiquing and post it in your group's forum

2. Do the Strengths questionnaire.

3. Progress your group's wiki work (as on the groupwork handouts)

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A place to stop

http://www.psy.gla.ac.uk/~steve/courses/posl4.html

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