

1: The Process Theories of Motivation

Another well-known need-based theory of motivation, as opposed to hierarchy of needs of satisfaction-dissatisfaction, is the theory developed by McClelland and his associates'. McClelland developed his theory based on Henry Murray's developed long list of motives and manifest needs used in his early studies of personality.

Types[edit] Event-based vs. Event-based prospective memory involves remembering to perform certain actions when specific circumstances occur. For example, driving past the local library cues the remembrance of the need to return an overdue book. Time-based prospective memory involves remembering to perform an action at a particular point in time. Research performed by Sellen et al. The difference in task performance between the two types of prospective memory suggests that the intended action was better triggered by external cues of the event-based task than internal cues of the time-based task. Types of event-based prospective memory: Delayed-execute tasks more commonly occur in real life when circumstances of a situation prevent intermediate action once the cue has been perceived. Research was performed by McDaniel et al. However, it was further shown that the use of reminders for participants eliminated the effects of the interruption task. The preparatory attentional and memory PAM theory[edit] The preparatory attentional and memory PAM theory proposes two types of processes involved in successful prospective memory performance. This monitoring component involves a capacity-consuming process, similar to those used when maintaining attention, because there is a need for the intention to be stored and maintained in memory. The second component involves the use of elements of retrospective memory processes. Retrospective memory is also used to remember specifically what intention is supposed to be performed in the future, and the monitoring process is needed to be able to remember to perform this action at the correct condition or time. Research conducted by McDaniel et al. In research by Reese and Cherry , participants formed an intention to act in the future, but were interrupted prior to acting on their intention when the cue was present. Reflexive-associative theory[edit] Further research conducted by Einstein and McDaniel in , found that subjects during prospective memory tasks reported that their intention often "popped" into mind, instead of being constantly monitored and consciously maintained. Later when the target cue occurs, the automatic associative-memory system triggers the retrieval of the intended action and brings it back into conscious awareness. Multi-process model[edit] Another theory that has been used to explain the mechanisms of prospective memory is the multi-process model proposed by McDaniel and Einstein Therefore, multiple processes can be used for successful prospective memory. Further, it was believed that it would be maladaptive to rely solely on active monitoring because it requires a lot of attentional resources. This may potentially interfere with other forms of processing that are required for different tasks during the retention interval. Further research has found that although many aspects of prospective memory tasks are automatic, they do involve a small amount of processing. Frontal lobe[edit] View of the frontal lobe red in the left cerebral hemisphere As prospective memory involves remembering and fulfilling an intention, it requires episodic memory , declarative memory , and retrospective memory, followed by supervisory executive functions. The prefrontal cortex is responsible for holding the intention in consciousness and suppressing other internal thoughts. They found that performance was impaired in the event-based tasks, which use event cues to trigger intentions, but not in the time-based tasks which use time cues to trigger intentions. Other lesion studies have also shown the use of the frontal lobe in remembering and focusing on intentions. Keeping track of information over time is important for prospective memory, remembering intentions to perform in the future. Limbic system[edit] Much of the limbic system , which contains primitive brain structures relating to emotion and motivation, are involved in memory. For prospective memory, the hippocampus is responsible for searching for the intended action among other memories. Their performance on both event-based and time-based prospective memory tasks was significantly impaired. Their prospective memory performance was also worse than that of the control group after immediate, minute, and seven-day delays, but was especially noticeable after the long delays because the patients could not maintain information for long periods of time. Patients also suffered in their speed of processing, disregarding distractions, and episodic memory. The same

impairment in prospective memory is also seen in patients with lesions to the hippocampus. Damage to the left hippocampus has shown to have a worse effect on prospective memory than damage to the right hippocampus. This shows the complexity of the brain and more research is needed to further understand the role of each section.

Parahippocampal region
View of the parahippocampal gyrus red in the left cerebral hemisphere
The parahippocampal gyrus surrounds the hippocampus. Sensory information passes from cortical areas, through the parahippocampal gyrus to the hippocampus. Studies using PET have come to the same conclusions regarding the use of the parahippocampal gyrus for prospective memory. It is suspected that the parahippocampal gyrus is additionally involved in monitoring the novelty of presented stimuli.

Thalamus
View of the thalamus red in the left and right cerebral hemispheres
The thalamus is also located near the hippocampus. It relays sensory information among cortical areas of the brain, mediating the responses of cells and attentional demands. Therefore, it is likely that the thalamus helps to maintain intentions and execute intentions only at the appropriate time. Its role in memory function is relaying information between the hippocampus and cortical areas.

Prospective memory requires retrospective memory because one must remember the information itself in order to act in the future. While prospective memory and retrospective memory are connected, they are distinguishable. This makes it possible to separate these two processes during tests.

Self-report
[edit] Early self-report measures
Many early measures of memory did not account for the distinction between prospective and retrospective memory. The Everyday Memory Questionnaire created by Sunderland et al. It is a questionnaire consisting of 16 items; in which participants rank how often memory failure occurs using a 5-point scale Very Often, Quite Often, Sometimes, Rarely, and Never. The PRMQ equally assesses three variables: The PRMQ has been proven to be a reliable and accurate method of testing memory. It has been evaluated against 10 other competing models [29] and used for a range of different demographics including gender, education, economic status, age and country of origin. For example, the study by Crawford et al. Many questions are used to test all possible combinations of the different memory types assessed by the PRMQ. Questions such as "Do you repeat the same story to the same person on different occasions?"

Prospective memory tasks
[edit] Prospective memory tasks can be used in a variety of ways to assess prospective memory. Firstly, results from these tasks can directly assess prospective memory. Finally, these tasks can be followed by questionnaires about prospective memory. Combining different assessments can confirm or deny experimental findings, making sure that conclusions about prospective memory are accurate. All tasks can assess individual stages of prospective memory such as the formation or execution of an intention, or access prospective memory as a whole by looking at overall performance.

Event-based prospective memory tasks
In event-based prospective memory tasks, participants are asked to remember to perform a task when cued by the appropriate information. There are numerous possible types of event-based tasks. For example, Raskin [33] asked participants to sign their name when given a red pen, while Adda et al.

Time-based prospective memory tasks
In time-based prospective memory tasks, participants are asked to remember to perform a task at a certain point in time. There are also numerous possible types of time-based tasks. For example, Cheng et al.

Standardized tests
Standardized tests have been created to uniformly test prospective memory and can incorporate different event-based and time-based tasks at the same time. Experimenters can test prospective memory by having people perform tasks in order, perform tasks in order but with interruptions, and multitask. A typical standardized test may include the following five steps: Participants are given verbal and written instructions and are allowed to use strategies such as note-taking in order to aid memory. Their performance is scored on a scale of 1 to 18, with 18 representing highest prospective memory performance.

Technological assessments
[edit] Technological assessments were created in order to more appropriately evaluate prospective memory by combining real life intentions with experimental control.

Virtual reality
In virtual reality , participants perform prospective memory tasks in a virtual world on a computer. Experimenters can create event-based tasks such as remembering to label boxes as fragile before moving or time-based tasks such as allowing a removal man to enter the house in five minutes. A distractor task is given at a certain point in order to test for prospective memory. Titov and Knight [37] used a PRVP with a video consisting of a pedestrian walking through a shopping district and required participants to make decisions on whether to buy certain items as if they were the pedestrian. Shopping

requires many prospective memory intentions such as remembering what items are needed and what items can be purchased another day. Factors affecting prospective memory[edit] Age[edit] There is an increasing amount of research on the effect of age on prospective memory where typical studies compare groups of people from different ages. A study by Smith et al. Genetics[edit] A study comparing prospective memory of non-psychotic first-degree relatives of patients with schizophrenia and healthy participant showed that the relatives performed significantly worse on time-based and event-based prospective memory tasks. Substance use[edit] Smoking Research shows mixed findings on the effect of smoking on prospective memory, but more evidence is in favour of smoking diminishing prospective memory performance. Self-reported measures such as the Prospective and Retrospective Memory Questionnaire PRMQ have reported no difference between smokers and non-smokers; however, results from prospective memory tasks have suggested otherwise. Tasks are more objective as they eliminate subjective biases which can occur on the PRMQ. A study by Heffernan et al. Alcohol Excessive drinkers self-reported more deficiencies in both short-term and long-term prospective memory on questions in the PRMQ. Binge drinkers and non-binge drinkers participated in two prospective memory sub-scales of the PRMQ. It was shown that increasing the amount of alcohol consumed per week was correlated with poorer prospective memory performance on the PRVP, illustrating a damaging effect of excessive drinking upon everyday prospective memory for adolescents. Cannabis Cannabis is a commonly used recreational drug derived from the plant *Cannabis sativa*. The drug targets the central nervous system and is associated with cognitive impairments such as deficits in decision-making , learning, and speed of processing. A study by Bartholomew et al. Ecstasy and methamphetamine Ecstasy: Prospective memory performance is sensitive to regular and even moderate ecstasy use. Methamphetamine is a highly abused drug known commonly as "crystal meth" and chronic use is known to cause cognitive impairment. Diseases and disorders[edit] Many diseases and disorders negatively affect prospective memory, as well as source memory, item recognition, and temporal order memory. Children with SCD have shown impairments in event-based prospective memory. More importantly, it is more difficult to manage the disease as they can forget about when to take medication or go to a doctor appointment. These effects can also persist into adulthood. Schizophrenia Schizophrenia has been shown to result in generalized prospective memory difficulties and is also associated with impairments in retrospective memory and executive functioning.

2: Multi-Process Theories - Oxford Scholarship

Multi-process model. Another theory that has been used to explain the mechanisms of prospective memory is the multi-process model proposed by McDaniel and Einstein ().

Difficult to measure with tests. Neurological capacity is largely fixed, but can be practiced to better use that capacity. Neurological capacity IQ is largely fixed, but can be studied and exercised to better use that capacity. Deficient in intellectual disability mental retardation. Disrupted by brain injury, mental illness, and various drugs. May be enhanced by certain drugs. In very rare cases, System 1 can be enhanced by brain injury, within a narrow domain, due to reduced neural inhibition acquired savant syndrome. The following require Systems 1 and 2 working in concert: System 1 [edit] Bargh reconceptualized the notion of an automatic process by breaking down the term "automatic" into four components: One way for a process to be labeled as automatic is for the person to be unaware of it. There are three ways in which a person may be unaware of a mental process: Another way for a mental process to be labeled as automatic is for it to be unintentional. Intentionality refers to the conscious "start up" of a process. An automatic process may begin without the person consciously willing it to start. The third component of automaticity is efficiency. Efficiency refers to the amount of cognitive resources required for a process. An automatic process is efficient because it requires few resources. An automatic process is uncontrollable, meaning that the process will run until completion and the person will not be able to stop it. Bargh conceptualizes automaticity as a component view any combination awareness, intention, efficiency, and control as opposed to the historical concept of automaticity as an all-or-none dichotomy. It is also known as the explicit system, the rule-based system, the rational system, [12] or the analytic system. It is domain-general, performed in the central working memory system. Because of this, it has a limited capacity and is slower than System 1 which correlates it with general intelligence. It is known as the rational system because it reasons according to logical standards. According to Neuberg and Fiske a perceiver who receives a good amount of information about the target person then will use their formal mental category Unconscious as a basis for judging the person. When the perceiver is distracted, the perceiver has to pay more attention to target information Conscious. Attitude can also be activated spontaneously by the object. According to Shelly Chaiken , heuristic processing is the activation and application of judgmental rules and heuristics are presumed to be learned and stored in memory. It is used when people are making accessible decisions such as "experts are always right" system 1 and systematic processing is inactive when individuals make effortful scrutiny of all the relevant information which requires cognitive thinking system 2. Unconscious thought theory is the counterintuitive and contested view that the unconscious mind is adapted to highly complex decision making. Where most dual system models define complex reasoning as the domain of effortful conscious thought, UTT argues complex issues are best dealt with unconsciously. Stereotyping[edit] Dual process models of stereotyping propose that when we perceive an individual, salient stereotypes pertaining to them are activated automatically. These activated representations will then guide behavior if no other motivation or cognition take place. However, controlled cognitive processes can inhibit the use of stereotypes when there is motivation and cognitive resources to do so. Devine provided evidence for the dual process theory of stereotyping in a series of three studies. Study 1 linked found prejudice according to the Modern Racism Scale was unrelated to knowledge of cultural stereotypes of African Americans. Study 2 showed that subjects used automatically-activated stereotypes in judgments regardless of prejudice level personal belief. Participants were primed with stereotype relevant or non-relevant words and then asked to give hostility ratings of a target with an unspecified race who was performing ambiguously hostile behaviors. Regardless of prejudice level, participants who were primed with more stereotype-relevant words gave higher hostility ratings to the ambiguous target. Study 3 investigated whether people can control stereotype use by activating personal beliefs. Low-prejudice participants asked to list African Americans listed more positive examples than did those high in prejudice. Distal defenses Deal with subconscious, abstract ideas of death Deal with conscious thoughts of death at the level of a specific threat Experiential Occur when mortality is not salient Occur immediately after direct reminder or threat of mortality Occur in response to subliminal

reminders of death Does not occur after subliminal reminders of death Operate by self-conception as a part of a death-transcendent reality i. Operate by pushing thoughts of death into the distant future and removing them from conscious thought Dual process and habituation[edit] Habituation can be described as decreased response to a repeated stimulus. According to Groves and Thompson, the process of habituation also mimics a dual process. The dual process theory of behavioral habituation relies on two underlying non-behavioral processes; depression and facilitation with the relative strength of one over the other determining whether or not habituation or sensitization is seen in the behavior. Habituation weakens the intensity of a repeated stimulus over time subconsciously. As a result, a person will give the stimulus less conscious attention over time. Conversely, sensitization subconsciously strengthens a stimulus over time, giving the stimulus more conscious attention. Though these two systems are not both conscious, they interact to help people understand their surroundings by strengthening some stimuli and diminishing others. In large-scale repeated studies with school students, Walker tested how students adjusted their imagined self-operation in different curriculum subjects of maths, science and English. He showed that students consistently adjust the biases of their heuristic self-representation to specific states for the different curriculum subjects. Evidence for early-stage concept formation and future self-operation within the hippocampus supports the model,. By contrast, fast unconscious automaticity is constituted by unregulated simulatory biases, which induce errors in subsequent algorithmic processes. An example of this is someone who as a student is hard working and intelligent, but as a sibling is caring and supportive. Given that there are two decision processes with differing goals one is more likely to be more useful in particular situations. For example, a person is presented with a decision involving a selfish but rational motive and a social motive. Depending on the individual one of the motives will be more appealing than the other, but depending on the situation the preference for one motive or the other may change. Using the dual-process theory it is important to consider whether one motive is more automatic than the other, and in this particular case the automaticity would depend on the individual and their experiences. A selfish person may choose the selfish motive with more automaticity than a non-selfish person, and yet a controlled process may still outweigh this based on external factors such as the situation, monetary gains, or societal pressure. Although there is likely to be a stable preference for which motive one will select based on the individual it is important to remember that external factors will influence the decision. Dual process theory also provides a different source of behavioral heterogeneity in economics. It is mostly assumed within economics that this heterogeneity comes from differences in taste and rationality, while dual process theory indicates necessary considerations of which processes are automated and how these different processes may interact within decision making. Studies on belief-bias effect were first designed by Jonathan Evans to create a conflict between logical reasoning and prior knowledge about the truth of conclusions. The results suggest when the conclusion is believable, people erroneously accept invalid conclusions as valid more often than invalid arguments are accepted which support unpalatable conclusions. This is taken to suggest that System 1 beliefs are interfering with the logic of System 2. This was done by burdening executive processes with secondary tasks. Results showed that when System 1 triggered the correct response, the distractor task had no effect on the production of a correct answer which supports the fact that System 1 is automatic and works independently of working memory, but when belief-bias was present System 1 belief-based response was different from the logically correct System 2 response the participants performance was impeded by the decreased availability of working memory. This falls in accordance with the knowledge about System 1 and System 2 of the dual-process accounts of reasoning because System 1 was shown to work independent of working memory, and System 2 was impeded due to a lack of working memory space so System 1 took over which resulted in a belief-bias. Vinod Goel and others produced neuropsychological evidence for dual-process accounts of reasoning using fMRI [30] studies. They provided evidence that anatomically distinct parts of the brain were responsible for the two different kinds of reasoning. They found that content-based reasoning caused left temporal hemisphere activation whereas abstract formal problem reasoning activated the parietal system. They concluded that different kinds of reasoning, depending on the semantic content, activated one of two different systems in the brain. The prefrontal cortex was critical in detecting and resolving conflicts, which are characteristic of System 2, and had already been associated with that System 2. The ventral medial prefrontal

cortex, known to be associated with the more intuitive or heuristic responses of System 1, was the area in competition with the prefrontal cortex. They examined the neural correlates on the inferior frontal cortex IFC activity in belief-bias reasoning using near-infrared spectroscopy NIRS. Subjects performed a syllogistic reasoning task, using congruent and incongruent syllogisms, while attending to an attention-demanding secondary task. The interest of the researchers was in how the secondary-tasks changed the activity of the IFC during congruent and incongruent reasoning processes. The results showed that the participants performed better in the congruent test than in the incongruent test evidence for belief bias ; the high demand secondary test impaired the incongruent reasoning more than it impaired the congruent reasoning. Participants with enhanced right IFC activity performed better on the incongruent reasoning than those with decreased right IFC activity. This study provided some evidence to enhance the fMRI results that the right IFC, specifically, is critical in resolving conflicting reasoning, but that it is also attention-demanding; its effectiveness decreases with loss of attention. The loss of effectiveness in System 2 following loss of attention makes the automatic heuristic System 1 take over, which results in belief bias. It mostly affects problems with abstract content. The Wason selection task provides evidence for the matching bias. If you introduce a negative component into the conditional statement of the Wason Selection Task, e. Changing the test to be a test of following rules rather than truth and falsity is another condition where the participants will ignore the logic because they will simply follow the rule, e. Pre-test results showed activation in locations along the ventral pathway and post-test results showed activation around the ventro-medial prefrontal cortex and anterior cingulate. Mithen theorizes that the increase in cognitive ability occurred 50,000 years ago when representational art, imagery, and the design of tools and artefacts are first documented. She hypothesizes that this change was due to the adaptation of System 2. They claim that the mind is modular, and domain-specific, thus they disagree with the theory of the general reasoning ability of System 2. They have difficulty agreeing that there are two distinct ways of reasoning and that one is evolutionarily old, and the other is new. But according to Evans [37] it has adapted itself from the old, logicist paradigm, to the new theories that apply to other kinds of reasoning as well. And the theory seems more influential now than in the past which is questionable. Evans outlined 5 "fallacies": All dual-process theories are essentially the same. There is a tendency to assume all theories that propose two modes or styles of thinking are related and so they end up all lumped under the umbrella term of "dual-process theories". There are just two systems underlying System 1 and System 2 processing. Hence the change to theorizing that processing is done in two minds that have different evolutionary histories and that each have multiple sub-systems. System 1 processes are responsible for cognitive biases; System 2 processes are responsible for normatively correct responding. Both System 1 and System 2 processing can lead to normative answers and both can involve cognitive biases. System 1 processing is contextualised while System 2 processing is abstract.

3: Prospective memory - Wikipedia

Dual-process theories of decision-making: a selective survey Isabelle Brocas University of Southern California and CEPR
Juan D. Carrillo University of Southern California and CEPR December Abstract Brain modularity is a key concept in neuroscience. It challenges the common view of the single coherent self adopted in many disciplines, including economics.

Not all such processes are introspective, however: The temporal proximity condition: You may know that you were thinking about Montaigne yesterday during your morning walk, but you cannot know that fact by current introspection alone—though perhaps you can know introspectively that you currently have a vivid memory of having thought about Montaigne. Likewise, you cannot know by introspection alone that you will feel depressed if your favored candidate loses the election in November—though perhaps you can know introspectively what your current attitude is toward the election or what emotion starts to rise in you when you consider the possible outcomes. On self-detection models of introspection, according to which introspection is a causal process involving the detection of a mental state see Section 2. On self-shaping and self-fulfillment models of introspection, according to which introspective judgments create or embed the very state introspected see Sections 2. Gathering sensory information about the world and then drawing theoretical conclusions based on that information should not, according to this condition, count as introspective, even if the process meets the three conditions above. Seeing that a car is twenty feet in front of you and then inferring from that fact about the external world that you are having a visual experience of a certain sort does not, by this condition, count as introspective. However, as we will see in Section 2. Introspection involves some sort of attunement to or detection of a pre-existing mental state or event, where the introspective judgment or knowledge is when all goes well causally but not ontologically dependent on the target mental state. For example, a process that involved creating the state of mind that one attributes to oneself would not be introspective, according to this condition. That is, it may meet all the four conditions above and yet we may resist calling such a self-attribution introspective. Introspection is not constant, effortless, and automatic. We are not every minute of the day introspecting. The mind may monitor itself regularly and constantly without requiring any special act of reflection by the thinker—for example, at a non-conscious level certain parts of the brain or certain functional systems may monitor the goings-on of other parts of the brain and other functional systems, and this monitoring may meet all five conditions above—but this sort of thing is not what philosophers generally have in mind when they talk of introspection. However, this condition, like the directness and detection conditions, is not universally accepted. For example, philosophers who think that conscious experience requires some sort of introspective monitoring of the mind and who think of conscious experience as a more or less constant feature of our lives may reject the effort condition Armstrong , ; Lycan No major contemporary philosopher believes that all of mentality is available to be discovered by introspection. For example, the cognitive processes involved in early visual processing and in the detection of phonemes are generally held to be introspectively impenetrable and nonetheless in some important sense mental Marr ; Fodor Many philosophers also accept the existence of unconscious beliefs or desires, in roughly the Freudian sense, that are not introspectively available e. The two most commonly cited classes of introspectible mental states are attitudes, such as beliefs, desires, evaluations, and intentions, and conscious experiences, such as emotions, images, and sensory experiences. These two groups may not be wholly, or even partially, disjoint: It of course does not follow from the fact if it is a fact that some attitudes are introspectible that all attitudes are, or from the fact that some conscious experiences are introspectible that all conscious experiences are. Some accounts of introspection focus on attitudes e. There is no guarantee that the same mechanism or process is involved in introspecting all the different potential targets. Generically, this article will describe the targets of introspection as mental states, though in some cases it may be more apt to think of the targets as processes rather than states. Also, in speaking of the targets of introspection as targets, no presupposition is intended of a self-detection view of introspection as opposed to a self-shaping or containment or expressivist view see Section 2 below. The targets are simply the states self-ascribed as a

consequence of the introspective process if the process works correctly, or if the introspective process fails, the states that would have been self-ascribed. For ease of exposition, this article will describe the products of the introspective process as judgments, without meaning to beg the question against competing views. These approaches are not exclusive. Surely there is more than one process by means of which we can obtain self-knowledge. Unavoidably, some of the same territory covered here is also covered, rather differently, in the entry on self-knowledge. A simplistic version of this view is that we know both our own minds and the minds of others only by observing outward behavior. On such a view, introspection strictly speaking is impossible, since the first-person condition on introspection condition 2 in Section 1. Twentieth-century behaviorist principles tended to encourage this view, but no prominent treatment of self-knowledge accepts this view in its most extreme and simple form. Consequently, this approach to self-knowledge is sometimes called the theory theory. We notice how we behave, and then we infer the attitudes evidenced by those behaviors—and we do so even when we actually lack the ascribed attitude. For example, Bem cites classic research in social psychology suggesting that when induced to perform an action for a small reward, people will attribute to themselves a more positive attitude toward that action than when they are induced by a large reward Festinger and Carlsmith ; see also Section 4. When we notice ourselves doing something with minimal compensation, we infer a positive attitude toward that activity, just as we would if we saw someone else perform the same activity with minimal compensation. Bem argues that social psychology has consistently failed to show that we have any appreciable access to private information that might tell against such externally-driven self-attributions. For example, people queried in a suburban shopping center about why they chose a particular pair of stockings appeared to be ignorant of the influence of position on that choice, including explicitly denying that influence when it was suggested to them. Gopnik a, b; Gopnik and Meltzoff deploys developmental psychological evidence to support a parity theory of self-knowledge. She points to evidence that for a wide variety of mental states, including believing, desiring, and pretending, children develop the capacity to ascribe those states to themselves at the same age they develop the capacity to ascribe those states to others. For example, children do not seem to be able to ascribe to themselves past false beliefs after having been tricked by the experimenter any earlier than they can ascribe false beliefs to other people. This appears to be so even when that false belief is in the very recent past, having only just been revealed to be false. According to Gopnik, this pervasive parallelism shows that we are not given direct introspective access to our beliefs, desires, pretenses, and the like. However, none of these authors develops an account of this apparently more direct self-knowledge. Their theories are consequently incomplete. Regardless of the importance of behavioral evidence and general theories in driving our self-attributions, in light of the considerations that drive Bem, Nisbett, Wilson, Gopnik, and Ryle to these caveats, it is probably impossible to sustain a view on which there is complete parity between first- and third-person mental state attributions. There must be some sort of introspective, or at least uniquely first-person, process. Any mental state that can only be known by cognitive processes identical to the processes by which we know about the same sorts of states in other people is a state to which we have no distinctively introspective access. States for which parity is often asserted include personality traits, unconscious motives, early perceptual processes, and the bases of our decisions see Section 4. We learn about these states in ourselves, perhaps, in much the same way we learn about such states in other people. Carruthers ; see also Section 4. But what does it mean to say that introspection is like perception? As Shoemaker a, b, c points out, in a number of respects introspection is plausibly unlike perception. For example, introspection does not involve a dedicated organ like the eye or ear though as Armstrong notes, neither does bodily proprioception. The visual experience of redness has a distinctive sensory quality or phenomenology that would be difficult or impossible to convey to a blind person; analogously for the olfactory experience of smelling a banana, the auditory experience of hearing a pipe organ, the experience of touching something painfully hot. To be analogous to sensory experience in this respect, introspection would have to generate an analogously distinctive phenomenology—some quasi-sensory phenomenology in addition to, say, the visual phenomenology of seeing red that is the phenomenology of the introspective appearance of the visual phenomenology of seeing red. This would seem to require two layers of appearance in introspectively attended sensory perception: See Bayne and Montague,

eds. Contemporary proponents of quasi-perceptual models of introspection concede the existence of such disanalogies e. One aspect of the detection condition deserves special emphasis here: Self-detection accounts of self-knowledge seem to put introspection epistemically on a par with sense perception. To many philosophers, this has seemed a deficiency in these accounts. Other accounts of self-knowledge to be discussed later in Section 2. Armstrong also appears to hold that the quasi-perceptual introspective process proceeds at a fairly low level cognitivelyâ€”quick and simple, typically without much interference by or influence from other cognitive or sensory processes. Since Armstrong allows that inferences are often non-conscious, based on sensory or other cues that the inferring person cannot herself discern, his claim that the introspective process is non-inferential is a substantial commitment to the simplicity of the process. He contrasts this reflexive self-monitoring with more sophisticated acts of deliberate introspection which he thinks are also possible , Lycan endorses a similar view, though unlike Armstrong, Lycan characterizes introspection as involving attentional mechanisms, thus presumably treating introspection as more demanding of cognitive resources though still perhaps nearly constant. Nichols and Stich also propose an analogous but somewhat more complicated mechanism they leave the details unspecified that takes percepts as its input and produces beliefs about those percepts as its output. Nichols and Stich emphasize that this Monitoring Mechanism does not operate in isolation, but often co-operates or competes with a second means of acquiring self-knowledge, which involves deploying theories along the lines suggested by Gopnik see Section 2. That is, they present, on the one hand, cases which they interpret as cases showing a breakdown in the Monitoring Mechanism, while the capacity for theoretical inference about the mind remains intact and, on the other hand, cases in which the capacity for theoretical inference about the mind is impaired but the Monitoring Mechanism continues to function normally, suggesting that theoretical inference and self-monitoring are distinct and separable processes. Conversely, Nichols and Stich argue that schizophrenic people remain excellent theorists about mental states but monitor their own mental states very poorlyâ€”for example, when they fail to recognize certain actions as their own and struggle to report, or deny the existence of, ongoing thoughts. But functional role is a matter of what is apt to cause a particular mental state and what that mental state is apt to cause see the entry on functionalism , and Goldman argues that a simple mechanism could not discern such dispositional and relational facts though Nichols and Stich might be able to avoid this concern by describing introspection as involving not just one but rather a cluster of similar mechanisms: Goldman also argues that the Nichols and Stich account leaves unclear how we can discern the strength or intensity of our beliefs, desires, and other propositional attitudes. Individual attended mental states are then classified into broad categories similarly, in visual perception we can classify seen objects into broad categories. Specific contents, especially of attitudes like belief, are too manifold, Goldman suggests, for pre-existing classificational categories to exist for each one. Visual representations, he suggests, have a different format or mental code than beliefs, and therefore cognitive work will be necessary to translate the fine-grained detail of visual experience into mental contents that can be believed introspectively. Hill , also offers a multi-process self-detection account of introspection. Like Goldman, Hill sees attention in some broad, non-sensory sense as central to introspection, though he also allows for introspective awareness without attention , â€” Hill emphasizes dissimilarities between introspection and perception, while retaining a broadly self-detection account. Hill argues that introspection is a process that produces judgments about, rather than perceptual awareness of, the target states, and suggests that the processes that generate these judgments vary considerably, depending on the target state, and are often complex. Like Hill, Prinz argues that introspection must involve multiple mechanisms, depending both on the target states e. The latter type of knowledge, Prinz argues, is much more detailed and finely structured than the former but cannot be expressed or retained over time. Prinz also follows Hill in emphasizing that introspection often intensifies or otherwise modifies the target experience. Consider the following four types of case: I judge that I am making a judgment about my own mental life. Such self-ascriptions are automatically self-fulfilling. Their existence conditions are a subset of their truth conditions. Self-ascriptions that prompt self-shaping: I declare that I have a mental image of a pink elephant. At the same time I make this declaration, I deliberately cause myself to form the mental image of a pink elephant. A man uninitiated in romantic love declares to a prospective lover that he is the kind of person who sends flowers to his lovers. At the same time he says this,

he successfully resolves to be the kind of person who sends flowers to his lovers. The self-ascription either precipitates a change or buttresses what already exists in such a way as to make the self-ascription accurate. In these cases, unlike the cases described in A , some change or self-maintenance is necessary to render the self-ascription true, beyond the self-ascriptional event itself. Accurate self-ascription through self-expression: Self-expressions of this sort are assumed here to flow naturally from the states expressed in roughly the same way that facial expressions and non-self-attributive verbal expressions flow naturally from those same states—that is, without being preceded by any attempt to detect the state self-ascribed.

4: Doing without Concepts - Hardcover - Edouard Machery - Oxford University Press

The Process Theories of Motivation. Whereas the content theories concentrate on the question of 'what' motivates, the process theories address more the issues relating to how the process works and sustains itself over time, such as factors that determine the degree of effort, the continuation of effort, the modification of effort, etc.

Visit the Thesaurus for More Choose the Right Synonym for theory hypothesis , theory , law mean a formula derived by inference from scientific data that explains a principle operating in nature. In the scientific method, the hypothesis is constructed before any applicable research has been done, apart from a basic background review. You ask a question, read up on what has been studied before, and then form a hypothesis. A theory , in contrast, is a principle that has been formed as an attempt to explain things that have already been substantiated by data. It is used in the names of a number of principles accepted in the scientific community, such as the Big Bang Theory. Because of the rigors of experimentation and control, it is understood to be more likely to be true than a hypothesis is. In non-scientific use, however, hypothesis and theory are often used interchangeably to mean simply an idea, speculation, or hunch, with theory being the more common choice. Since this casual use does away with the distinctions upheld by the scientific community, hypothesis and theory are prone to being wrongly interpreted even when they are encountered in scientific contextsâ€”or at least, contexts that allude to scientific study without making the critical distinction that scientists employ when weighing hypotheses and theories. The most common occurrence is when theory is interpretedâ€”and sometimes even gleefully seized uponâ€”to mean something having less truth value than other scientific principles. The word law applies to principles so firmly established that they are almost never questioned, such as the law of gravity. This mistake is one of projection: The distinction has come to the forefront particularly on occasions when the content of science curricula in schools has been challengedâ€”notably, when a school board in Georgia put stickers on textbooks stating that evolution was "a theory, not a fact, regarding the origin of living things. A theory is a system of explanations that ties together a whole bunch of facts. It not only explains those facts, but predicts what you ought to find from other observations and experiments. Most of these are used without difficulty, and we understand, based on the context in which they are found, what the intended meaning is. For instance, when we speak of music theory we understand it to be in reference to the underlying principles of the composition of music, and not in reference to some speculation about those principles. However, there are two senses of theory which are sometimes troublesome. One may certainly disagree with scientists regarding their theories, but it is an inaccurate interpretation of language to regard their use of the word as implying a tentative hypothesis; the scientific use of theory is quite different than the speculative use of the word. Examples of theory in a Sentence The immune surveillance theory of cancer holds that in a way we all do have cancer, that a healthy immune system fights off rogue cells as they appear. Doctorow, Loon Lake, While strolling around, we kept the run of the moon all the time, and we still kept an eye on her after we got back to the hotel portico. This daring theory had been received with frantic scorn by some of my fellow-scientists, and with an eager silence by others. There are a number of different theories about the cause of the disease. She proposed a theory of her own. Investigators rejected the theory that the death was accidental. There is no evidence to support such a theory. He is a specialist in film theory and criticism. A new report sheds some light," 5 July The finale seemingly confirmed the theory, as Stubbs tells Halores all about his core drives and past association with the park.

5: Process theories of motivation

For example, should the multi-process theory be true, a client needing to reduce somatic anxiety could be taught a somatic-based relaxation method, while a client desiring to reduce cognitive anxiety, could be instructed in a cognitive-based technique.

Top 8 Theories of Motivation Explained! Some of the most important theories of motivation are as follows: From the very beginning, when the human organisations were established, various thinkers have tried to find out the answer to what motivates people to work. Different approaches applied by them have resulted in a number of theories concerning motivation. These are discussed in brief in that order. Drawing chiefly on his clinical experience, he classified all human needs into a hierarchical manner from the lower to the higher order. In essence, he believed that once a given level of need is satisfied, it no longer serves to motivate man. Then, the next higher level of need has to be activated in order to motivate the man. Maslow identified five levels in his need hierarchy as shown in figure. These are now discussed one by one: These needs are basic to human life and, hence, include food, clothing, shelter, air, water and necessities of life. These needs relate to the survival and maintenance of human life. They exert tremendous influence on human behaviour. These needs are to be met first at least partly before higher level needs emerge. Once physiological needs are satisfied, they no longer motivate the man. After satisfying the physiological needs, the next needs felt are called safety and security needs. These needs find expression in such desires as economic security and protection from physical dangers. Meeting these needs requires more money and, hence, the individual is prompted to work more. Like physiological needs, these become inactive once they are satisfied. Man is a social being. He is, therefore, interested in social interaction, companionship, belongingness, etc. It is this socialising and belongingness why individuals prefer to work in groups and especially older people go to work. These needs refer to self-esteem and self-respect. They include such needs which indicate self-confidence, achievement, competence, knowledge and independence. The fulfillment of esteem needs leads to self-confidence, strength and capability of being useful in the organisation. However, inability to fulfill these needs results in feeling like inferiority, weakness and helplessness. This level represents the culmination of all the lower, intermediate, and higher needs of human beings. In other words, the final step under the need hierarchy model is the need for self-actualization. This refers to fulfillment. The term self-actualization was coined by Kurt Goldstein and means to become actualized in what one is potentially good at. According to Maslow, the human needs follow a definite sequence of domination. The second need does not arise until the first is reasonably satisfied, and the third need does not emerge until the first two needs have been reasonably satisfied and it goes on. The other side of the need hierarchy is that human needs are unlimited. The main criticisms of the theory include the following: The needs may or may not follow a definite hierarchical order. So to say, there may be overlapping in need hierarchy. For example, even if safety need is not satisfied, the social need may emerge. The need priority model may not apply at all times in all places. In case of some people, the level of motivation may be permanently lower. Herzberg conducted a widely reported motivational study on accountants and engineers employed by firms in and around Western Pennsylvania. He asked these people to describe two important incidents at their jobs: He used the critical incident method of obtaining data. The responses when analysed were found quite interesting and fairly consistent. The replies respondents gave when they felt good about their jobs were significantly different from the replies given when they felt bad. Reported good feelings were generally associated with job satisfaction, whereas bad feeling with job dissatisfaction. Herzberg labelled the job satisfiers motivators, and he called job dissatisfies hygiene or maintenance factors. The underlying reason, he says, is that removal of dissatisfying characteristics from a job does not necessarily make the job satisfying. He believes in the existence of a dual continuum. People generally tend to take credit themselves when things go well. They blame failure on the external environment. The theory basically explains job satisfaction, not motivation. Even job satisfaction is not measured on an overall basis. This theory neglects situational variable to motivate an individual. Because of its ubiquitous nature, salary commonly shows up as a motivator as well as hygiene. The main use of his

recommendations lies in planning and controlling of employees work. He found that people who acquire a particular need behave differently from those who do not have. They are defined as follows: This is the drive to excel, to achieve in relation to a set of standard, and to strive to succeed. In other words, need for achievement is a behaviour directed toward competition with a standard of excellence. Through his research, McClelland identified the following three characteristics of high-need achievers: High-need achievers have a strong desire to assume personal responsibility for performing a task for finding a solution to a problem. High-need achievers tend to set moderately difficult goals and take calculated risks. High-need achievers have a strong desire for performance feedback. The need for power is concerned with making an impact on others, the desire to influence others, the urge to change people, and the desire to make a difference in life. People with a high need for power are people who like to be in control of people and events. This results in ultimate satisfaction to man. People who have a high need for power are characterized by: A desire to influence and direct somebody else. A desire to exercise control over others. A concern for maintaining leader-follower relations. The people with high need for affiliation have these characteristics: They have a strong desire for acceptance and approval from others. They tend to conform to the wishes of those people whose friendship and companionship they value. They value the feelings of others. The chart shows the parallel relationship between the needs in each of the theories. Maslow refers to higher- lower order needs, whereas Herzberg refers to motivation and hygiene factors. Douglas McGregor formulated two distinct views of human being based on participation of workers. The first basically negative, labeled Theory X, and the other basically positive, labeled Theory Y. Theory X is based on the following assumptions: People are by nature indolent. That is, they like to work as little as possible. People lack ambition, dislike responsibility, and prefer to be directed by others. People are inherently self-centered and indifferent to organisational needs and goals. People are generally gullible and not very sharp and bright. On the contrary, Theory Y assumes that: People are not by nature passive or resistant to organisational goals. They want to assume responsibility. They want their organisation to succeed. People are capable of directing their own behaviour. They have need for achievement. What McGregor tried to dramatise through his theory X and Y is to outline the extremes to draw the fencing within which the organisational man is usually seen to behave. The fact remains that no organisational man would actually belong either to theory X or theory Y. What actually happens is that man swings from one set or properties to the other with changes in his mood and motives in changing. Much after the propositions of theories X and Y by McGregor, the three theorists Urwick, Rangnekar, and Ouchi-propounded the third theory labeled as Z theory. It must be noted that Z does not stand for anything, is merely the last alphabet in the English Language. Theory Z is based on the following four postulates: Strong Bond between Organisation and Employees 2. Employee Participation and Involvement 3. No Formal Organisation Structure 4.

6: Motivation Theories: Top 8 Theories of Motivation – Explained!

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The Porter-Lawler Model Equity theory In this theory employee constantly assesses their level of effort against fellow workers and the reward they receive for their effort. Likewise, the relative reward for effort is also monitored. The message for managers is that employees need to be seen to be rewarded on a fair and equitable basis, and inequities quickly adjusted. Activity Have you seen or experienced situations where one employee does all the work but gets only the same wages as their fellow employees? What is likely to be the outcome of such a situation? From a Human Resources Management perspective, formal and informal performance management processes are used to identify and adjust inequities. Expectancy Theory This has been an important theory in the history of the study of motivation. This theory highlights that motivation is partly a decision-making process that evaluates effort for outcomes. It highlights the involvement of the active cognitive processes and user choice in the process. It also highlights the importance of the outcome representing a valued reward for the individual involved. The actual evaluation process is broken down into a number of parts: If I put in effort, can I expect to perform at the required task? Will performing this act or task achieve a desired outcome? Can I expect the outcome will be available and forthcoming? For example do I have the time, energy and commitment to undertake this course? If I pass the course will my promotion chances increase? Do you go through such a logical evaluation process everytime you need to make a decision, or do you often make decisions on intuition, whims etc? It focuses on the relationship between anticipated future rewards and present behaviour. The Porter-Lawler Model This model of motivation although based on the expectancy theory, is probably the most complete theory of workplace motivation. It is an integrated approach that includes elements of nearly all the other motivation theories. This is important as it helps explain why each of the various theories have a contribution to make but also serious limitations. If we consider each as part of a more complex model of motivation this starts to make sense. A more integrated approach is needed. However it is difficult to argue with the process of the model.

7: Doing without Concepts - Paperback - Edouard Machery - Oxford University Press

Ultimately these examples of process theories of motivation endeavor to describe human beings' motivation and impetus for behavior as a symptom of our cognitive procedures and rational thought patterns.

Process theories of motivation Personal needs drive behaviour Process theories of motivation are about a cognitive rational process and concentrate on the psychological and behavioural processes that motivate an individual. People need to see what is in it for them and to sense that "fair play" is being exercised to all concerned. Clearly a basic understanding of this is foundational to the psychological underpinning of successful change management and the strategies for managing change that will deliver that. These process theories of motivation also totally support and underpin the findings and practical observations of Goleman, Katzenbach, Pearson, Axelrod and others referred to in Inspirational Motivation and the research and thought leadership highlighted in Leading Change. The two main process theories of motivation are Expectancy Theory and Equity Theory. Expectancy theory [also called Valence-Instrumentality-Expectancy Theory or VIE Theory] is associated with Vroom, Porter and Lawler and it suggests that effort a is linked to the desire for a particular outcome, and b moderated by an evaluation of the likelihood of success. Expectancy Theory This is a pragmatic perspective that assumes that as we are constantly trying to predict potential future outcomes, we attempt to create what we perceive to be as realistic expectations about future events. Thus if things look reasonably likely and attractive, and if we know what to do in order to get there, and we believe we can actually do it, then this will motivate us to act to make this future come true. According to Victor Vroom, individual motivation depends on three variables, namely: Force, Valence and Expectancy. The value of the anticipated outcome Instrumentality: The belief that if I complete certain actions then I will achieve the outcome. Confidence in my capability i . The belief that I am able to complete the actions. The conclusions that can be drawn from this theory are: So if one person is getting too little from the relationship, then clearly they are going to be unhappy with this but it is also likely that the other person will also be feeling rather guilty about this imbalance. This is reinforced by strong social norms about fairness. Equity Theory Equity theory states that in return for an input of skills, effort or production, the employee receives an outcome expressed in terms of any combination of salary, status and fringe benefits. This creates a ratio of input to outcome and equity is achieved when the ratios are the same for everyone in organisation. When individuals believe that they have been treated unfairly in comparison with their coworkers, they will react in one of four ways: Practical Application of Process Theories of Motivation to change leadership and management Unlike the other theories of motivation that we have discussed on this site, process theories of motivation are to do with motivation that is rational and cognitive rather than emotional. They need to see the steps and they need to believe that they can do it and that they want to. They also need to believe in the equity or fairness of what you tell you.

8: c - Multiple child process - Stack Overflow

Process theories of motivation are about a cognitive rational process and concentrate on the psychological and behavioural processes that motivate an individual. Put simply, this is all about how people's needs influence and drive their behaviour.

Mainly Semantic but can be visual and auditory Key Studies Glanzer and Cunitz showed that when participants are presented with a list of words, they tend to remember the first few and last few words and are more likely to forget those in the middle of the list, i. Words early on in the list were put into long term memory primacy effect because the person has time to rehearse the word, and words from the end went into short term memory recency effect. Critical Evaluation Strengths One strength of the multistore model is that it gives us a good understanding of the structure and process of the STM. This is good because this allows researchers to expand on this model. This means researchers can do experiments to improve on this model and make it more valid and they can prove what the stores actually do. Therefore, the model is influential as it has generated a lot of research into memory. Many memory studies provide evidence to support the distinction between STM and LTM in terms of encoding, duration and capacity. The model is supported by studies of amnesiacs: For example the HM case study. HM is still alive but has marked problems in long-term memory after brain surgery. He has remembered little of personal death of mother and father or public events Watergate, Vietnam War that have occurred over the last 45 years. However his short-term memory remains intact. Weaknesses The model is oversimplified, in particular when it suggests that both short-term and long-term memory each operate in a single, uniform fashion. We now know this is not the case. It has now become apparent that both short-term and long-term memory are more complicated than previously thought. For example, the Working Model of Memory proposed by Baddeley and Hitch showed that short term memory is more than just one simple unitary store and comprises different components e. In the case of long-term memory, it is unlikely that different kinds of knowledge, such as remembering how to play a computer game, the rules of subtraction and remembering what we did yesterday are all stored within a single, long-term memory store. Indeed different types of long-term memory have been identified, namely episodic memories of events, procedural knowledge of how to do things and semantic general knowledge. For instance, the model ignores factors such as motivation, effect and strategy e. Also, rehearsal is not essential to transfer information into LTM. For example, why are we able to recall information which we did not rehearse e. Therefore, the role of rehearsal as a means of transferring from STM to LTM is much less important than Atkinson and Shiffrin claimed in their model. The model's main emphasis was on structure and tends to neglect the process elements of memory e. For example, elaboration rehearsal leads to recall of information than just maintenance rehearsal. Elaboration rehearsal involves a more meaningful analysis e. For example, giving words a meaning or linking them with previous knowledge. A proposed system and its control processes. The psychology of learning and motivation Volume 2. Advances in research and theory Vol. A framework for memory research. Journal of Verbal Learning and Verbal behavior, 11, Real differences and language differences. Behavioral and Brain Sciences, 26, How to reference this article: Multi store model of memory.

9: Dual process theory - Wikipedia

The big list of academic theories, postulates, hypotheses, etc. on which persuasion techniques are based.

EXAMPLES OF MULTI-PROCESS THEORIES pdf

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