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## **SUBSTANCE USE FRAMED AS SITUATIONAL ACTION**

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Nina-Katri Gustafsson



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**Dr. Phil. Nina-Katri Gustafsson**

*the Department of Sociology, Stockholm University, Stockholm, Sweden*

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### ***Abstract***

The article first aimed at identifying important theories and research which have been suggested to explain why people use substances. Over the years the research field has become immense and scattered, to some extent divided and specialized, which restrains the potential of knowing what matters most. A second aim was therefore to show how these various aspects could be incorporated into a common theoretical framework. Three central theoretical traits were identified in the literature, suggesting that substance use is affected by laws and policies in society, norms and behaviours of others and people's individual characteristics. This fits well with the Situational Action Theory suggesting that individual and environmental factors matter, but that the interaction between them is most important, and further clarifies the patterns and links between different explanations. This is helpful when determining the real causes of substance use and might further assist in selecting between various policy approaches.

**Keywords:** Situational Action Theory (SAT), Substance Use/Abuse, Alcohol, Illegal substances, Medical drugs

**Conflict of interest:** No conflict of interest to declare.

## **Substance Use Framed as Situational Action**

### **Introduction**

Research on substance use has been carried out for a long time, because excessive use (sometimes even any kind of use) and its negative consequences have been identified as a problem by many societies. Some of this research has intended to explain why people use substances. Since the research field of substance use is multidisciplinary this adds up to a large number of explanations; only occasionally are they related to one another. There is, however, a value in aiming at combining separate theoretical aspects into a common theoretical frame as this would allow us to understand how different explanations relate to each other. As policies and laws, at least to some extent, lean on research it is important to decide on which of all explanations presented is most important and what is most valuable to focus on when developing policies and laws. As Wikström and colleagues (2012) put it “A discipline that is fragmented, theoretically and empirically, is of little help for politicians, policy makers, and practitioners who want to base their policies and interventions on the best available scientific knowledge” (p. 4). As the result section in this paper shows, there are many correlates which assumingly could explain substance use but without a theoretical ground these will merely be correlates and it will be impossible to know the real cause of use or what matters most. Without knowing the causes, the chances of designing successful interventions are smaller and the risk of policies changing with political governments larger. This also means that a great variety of explanations should be considered. To reject other disciplines than our own is counterproductive since societies and people are complex and thus a theory aiming to explain any phenomenon in society needs to be complex. A theory which acknowledges different aspects in the explanation of why people use substances at the same time as it decides what explanation matters most, i.e. the true cause, is needed. In this paper it

is argued in favour of an analytical approach and it is discussed whether Situational Action Theory can serve as a theoretical framing when explaining substance use.

### *Theoretical framing*

The Situational Action Theory (SAT) was first developed by Per-Olof Wikström with the aim of explaining why people commit crimes (Wikström et al. 2012). In relation to crime, the theory has successfully been tested. As the theory defines crime as a breach of rule of conduct, it is suitable for testing other acts which would also follow or break social norms/moral rules. Wikström and Treiber (2016) enable this by stating that SAT asserts that “the same process which explains why people follow or break the rules of law should also explain why people break other kinds of moral rules (e.g. informal social norms)” (p. 431). Just as different types of crimes vary along a continuum of how wrong people perceive them to be, so can different levels of use and different types of substances vary along a continuum of rules of conduct scale. Situational theories focus on explaining *why* an act is carried out and pay especially great attention to *how* the interaction between people and environments result in people using substances (Wikström and Treiber 2016). Using an integrated framework can more effectively focus on the factors relevant for explaining use of substances. By adapting the situational action theory to substance use, insights on how different explanations relate to each other and what is most important can be acquired.

### *Objective*

The purpose of this paper is to assemble what has been suggested to explain substance use; why and when people use alcohol and other drugs. It is further discussed whether earlier research can be interpreted in relation to Situational Action Theory (SAT) and give suggestions on how to advance further in this research area. The aim of this article is thus

three-folded:

- to give a brief overview of earlier suggested explanations of substance use,
- to give an overview of the central aspects of SAT, and
- to examine whether substance use can be seen as a situational action.

It is hypothesized that, given the nature of substance use, it will be difficult to decide on a single explanation or to get a clear picture of what matters most based on earlier theories and studies but that the crucial element of SAT and a further adaptation of the theory will be able to fill this gap in substance use research.

#### *Definition of substance use*

Substance use is a very unspecific term and can be considered as an umbrella term for both legal and illegal substances which can be very harmful or not very harmful at all, as well as for different levels of use. In this article the discussion is limited to psychoactive substances, more specifically to legal and illegal drugs and to drugs which are considered to be in the “grey zone”, e.g. prescription drugs or drugs which are not yet illegal although used for the same reason. It covers more commonly accepted drugs such as alcohol, tobacco and cannabis (licit use) and less commonly accepted drugs such as amphetamine, cocaine, ecstasy, LSD or heroin (illicit use). The definition also includes e.g. solvents, glue, aerosols, tranquilizers and GHB. It furthermore refers to different purposes of using (recreational, experimental, intoxication) and levels of use (occasional, moderate or high, abuse/addiction/dependence). Through history, the use of concepts and the meaning of them has varied with fashion and between different societies (Room 2003, 2006; Room and Mäkelä 2000) and recently it was noted that no sharp line between habitual use and addiction has been made (Room 2014). This can be problematic from a theoretical perspective since it is not always clear what theories try to explain. Some concepts additionally include consequences as part of the

definition (Room 2004). This article focuses on the causes of use; related consequences are relevant only if they have an impact on why people use substances. It is furthermore discussed whether substance use can be defined as a situational action, thereby defining it first and foremost as an act which either follow or break rules of conduct (social norms). Although argued that it is not needed to define between different substance use, it is acknowledged that certain substances and use at the higher end of the use spectrum in general tend to be less accepted than other use and thus more often breach rules of conduct. For consistency and to distinct it from the research field focused on addiction, the general term use will be applied unless a specific point is being made.

### *The Outline*

The outline of this article is to start by describing the literature review conducted. Findings from the review are presented broadly, focusing on strengths and weaknesses in other theories of substance use. Central elements of SAT are then presented and it is suggested how the research field of substance use can benefit from building on this theoretical framework. A final discussion concludes the article.

### *Delimitation*

The article will focus on explanations of why people use or do not use substances but will not try to explain why or how certain rules of conduct are formulated. It will discuss some central theories which have been put forward with the aim of explaining substance use but it does not claim to give a full overview of all theories. Variations in use depending on individual characteristics will not be covered. Earlier research has also shown that the role of substances is two-folded. It is well known that substances can function as a mediator in the criminogenic process, being part of the social setting, and thus interfering in the process of generating

crimes (by increasing or decreasing the likelihood) (Bennett and Holloway 2005, 2009; Parker and Auerhahn 1998). In this article substance use as the main outcome will only be covered.

## **Methods**

It is often recommended that a systematic literature review is performed when researchers aim at getting an overview of a research question. It is, however, also argued that a systematic review is not feasible unless the research question is specific and well-confined. Since the aim was to receive a broad overview of the research field concerning what explains substance use (at any level of use) and thus had a very broad and unspecific aim, a full systematic literature review was not suitable. Being an interdisciplinary field, research on all of the various aspects of use fast adds up to a large number of publications. An initial electronic search on Google Scholar (on 22 August 2014) by the keywords explanation/explain or cause in relation to substance/alcohol/drugs was performed. The purpose was to acquire suggestions on search terms for the “real search”. This initial literature search confirmed that the research field is very broad and scattered and that many causes to why people use substances at all or in a harmful way are suggested. To discuss the use of a theoretical framework aimed at explaining substance use, further searches focused on theoretical frameworks of substance use. An overview of earlier theories to establish what they had already claimed to explain seemed reasonable. In order to at least cover theories often cited, a broad search concentrating on theories was performed using the search engine proquest.com<sup>i</sup> on 7 October 2014. Only peer-reviewed publications written in English were included and the search focused on abstracts and titles<sup>ii</sup>. Library searches and complimentary searches on Google and Google Scholar were also performed and additionally the author’s more than ten years of prior knowledge from the field (particularly from the disciplines of sociology and public health) as well as comments from colleagues contributed with supplementary theories. Personal knowledge is according to

Greenhalgh and Peacock (2005) especially important when reviewing complex and heterogeneous subjects. Rather than summarizing all theories, the result section focuses on discussing aspects which appears to play a central role in explaining use and a selection of separate theories are only covered shortly here why readers are referred to the original sources for more information. The general patterns in the literature are further drawn upon when developing the theoretical explanation of substance use in relation to those suggested by SAT.

### **Results – earlier theories and their shortcomings**

Research on substance use, on alcohol in particular, has been conducted since the early 1800's (Oetting and Beauvais 1986). As a natural consequence, theories trying to explain alcohol and/or drug use are many. The traditional focus has been on problematic and harmful consumption, and although research more recently has been conducted on recreational use and positive effects related to use, the core of this research field is dominated by the problem oriented perspective which can be illustrated by the fact that addiction has developed to a research field of its own. This has effects on what kinds of explanations are given. The research field of substance use is further interdisciplinary and theories have been developed in a wide range of scientific disciplines, i.e. in sociology, criminology, anthropology, economy, philosophy, political science, psychology, psychiatry, epidemiology, biomedical sciences, biology, neurosciences and genetics. Different disciplines have tended to focus on diverse aspects of the puzzle, and although acknowledging that explanations in other disciplines than their own also might be relevant, few have made a well-reasoned attempt to incorporate them into the same theoretical framing. West and Brown stated "each theory seems to stem from an idea or set of ideas that accounts for a part of the problem but does not account for other features that were previously addressed by other theories" (West and Brown 2013, p. 1). Among the attempts that have been made to combine elements into a common theoretical

frame, few if any have been successful. In the literature search performed for the purpose of this article, the research field came out as scattered and this is in line with earlier overviews from the research field. Three rough types of focal points in the explanations, which were also on different levels of abstraction, were identified as central. The first one suggesting that people's substance use can be explained by aspects on macro and meso levels, by structures in society and by national and global impacts. This group of theories suggest that laws and policies in society as well as characteristics of cities, communities, neighbourhoods and schools have an effect on people's substance use. A second group of theories focused on explanations on the micro level, on that individuals are influenced by other persons or groups of people either through their actual behaviours or through their norms. Finally, the third group of theories focused on the individual explanations, personal rules of conduct and individual characteristics. This division corresponds fairly well with that made by Lettieri, Sayers and Wallenstein Pearson (1980), who made a division between self, others, society and nature as well as the division of correlates to substance use into biological, psychological and social/environmental factors made by Galizio and Maisto (1985). The division into three types made in this article should be understood as crude since theories tend to overlap each other. The overlap is in itself a finding which supports that explanations are complex and a more thorough approach should be applied. The literature search further supported the initial hypothesis that diversity obstructs the potential of knowing what matters most unless the explanations are related to each other.

*Societal influences (laws, policies, community)*

On the macro level, substance use is restricted and controlled by laws and national policies. The purpose is to control unwanted behaviours and minimize negative consequences related to substance use, whether it is for the person him-/herself or for other people (Babor et al.

2010a, 2010b; Edwards 1997; Wagenaar and Burris 2013). Laws might have an influence on the behaviour itself or shape the environments which indirectly affect the behaviour (Komro, O'Mara and Wagenaar 2013, p. 5). Economic theoretical assumptions suggest that demand is affected by price (Chaloupka, Grossman and Saffer 2002). Additionally, the availability and supply of substances is crucial (Flay 1999). As a result of that and shown efficiency, the dominating control instruments for limiting alcohol consumption in many countries have been to keep taxes and prices high and limit the physical availability by regulating alcohol outlet density and their location, restricting sales hours of outlets and the number of days open or by having a minimum legal drinking age (Babor et al. 2010a; Edwards 1997; Room 2012; Wagenaar and Burris 2013). It is well known that high taxes and prices also reduce the demand and use of tobacco and other drugs (Chaloupka 2013, p. 156), why similar approaches are practiced for other substances as well (to the extent it is possible). Ultimately, laws and policies can be seen as definitions of what behaviours the society agrees to, the social norm, what is socially accepted and what is not. Various societies have very different comprehensions of acceptable use and due to this substance use can be either restricted or legally prohibited (Joffe and Yancy 2004; Room and Mäkelä 2000). Also within the same country, there can be variances regarding where certain drugs are sold or used (de Jong and Weber 1999; Korf 2002). What has been accepted has also varied greatly over time (Edwards 2005) and this can change very fast (e.g. Enayat Khan 28/05/2008; Grimley 21/06/2014; Pacula and Sevigny 2014; TT 15/10/2014). By restricting availability, price, and advertisement or by criminalize use of certain substances, negative outcomes related to high levels of use or use in specific population groups, the society sets the frames for what are acceptable behaviours in specific settings. Although not always in concordance with official policies and laws, more informal rules about what is accepted behaviours interact with the formally formulated moral rules. These informal rules are present in different drinking, drug

and tobacco (sub-)cultures which state the general frames, i.e. which substances and in what way they should be consumed in that population (Room 2003; Room and Mäkelä 2000; Room et al. 2012). Environment on a more local level, i.e. community or neighbourhood level, has also been linked to people's substance use (Sellström et al. 2011). It has been suggested that some neighbourhoods and communities increase the risk for health and social problems, e.g. substance use (Komro, O'Mara and Wagenaar 2013), and it is often assumed that less well of areas are particularly problematic whether it is because of an accumulation of different problems (Chein 1980) or an increased availability in these areas (Smart 1980). Alcohol research has tended to focus on drinking context. What is meant by drinking context is, however, not well defined and it can refer to either time of day or week, the physical location, what kind of occasion it is and which other persons that are present during the drinking event (Cahalan, Cisin and Crossley 1969; Knibbe 1998; Simpura 1991). Consumption is often assumed in these studies, i.e. only consumers respond to the questions, and focus is on how large volumes are consumed and under what circumstances use result in harm (an aspect which is not discussed further in this article). A comparison can be made to the criminological concept of hotspots, i.e. it can be argued that substance use is more common (and encouraged) in certain geographical places. It is understood that behaviour socially accepted in one context might not be accepted in another (Sussman and Sussman 2011). Thus, environment seems to matter, especially if theories formulated in the social sciences are considered. General laws and policies limit availability and it can be argued that by defining when and where it is okay to consume and by whom, they can also define the moral frames for what is accepted in society. Policies and laws matters for people's substance use (Babor et al. 2010a, 2010b) but it seems reasonable to assume that the immediate environment is even more important (although it is influenced by societal policies). If policies and laws were most important, no one would use substances ("too much") in countries with very restrictive laws and policies,

e.g. in Sweden. Thus, without questioning their importance, they cannot be the main explanation and something else has to matter (more)<sup>iii</sup>. For a person who considers substance use to be an accepted behaviour given the circumstances, laws and policies will not really matter as the person will use substances when presented with a chance of doing so, engage in underage drinking or smoke cannabis even if it is prohibited by juristic laws. For the same reasons, characteristics of neighbourhoods and communities will not determine whether a person decides to use a substance or not, although there might be differences in level of use between areas. The literature on contexts and the people present at the substance use occasions stress the importance of the immediate environment.

### *The influence of others*

As mentioned earlier, in relation to context, substance use has also been assumed to be socially patterned. It is argued that it is influenced by people we spend time with. Although rather focusing on consumption levels in societies in his theory of collectivity of drinking cultures, Skog explained alcohol use with social interactions, arguing that social ties has an impact also on others than the circle of significant others (1985). Larger networks might influence person's substance use but it is expected that persons people spend time with on a regular basis have a greater impact on behaviours. Theories have given weight to the importance of interactions with families and friends in the development of values and norms (e.g. social bonding theory: Hirschi 1969). While a country's culture frames the general attitude, more intimate relationships has a more direct influence on whether people use substances and how much. Norms and customs are internalised, through socialization processes (Kohlberg 1981; Mead 1934), where parents, peers and others guide the person's behaviours. Depending on which norms that are in play, they can encourage or dissuade people from using substances. Parent's attitudes and supervision have been shown to be

important for substance use and other deviant behaviours (Fagan et al. 2013; Foxcroft and Lowe 1991; Gottfredson and Hirschi 1990; Hirschi 1969; Windle et al. 2009) but the actual behaviour of parents is even more important and parent's substance use have been shown to influence young people's use (Chassin et al. 1993; Fawzy, Coombs and Gerber 1983). As young people get older, the influence of peers increases. Theorists focusing on this influence argue that peer influences can either encourage or discourage substance use as well as (other) deviant behaviours (Akers and Jennings 2009; Bandura 1977; Becker 1953; Berkowitz 2003; Maisto, Carey and Bradizza 1999, Oetting and Beauvais 1986; Perkins and Berkowitz 1986). Peer pressure has also been mentioned, in relation to substance use among young people and in relation to initiation of use in particular. Friends do, however, influence adults drinking as well (Astudillo et al. 2013). Critics argue that individuals choose peers based on similarity, and therefore selection processes can also matter (Bauman and Ennett 1996; Cohen 1977). Although both parental and peer substance use have been shown to affect use among young people, peer's use is more important (Chassin et al. 1986; Hu et al. 1995; Huba and Bentler 1980; Kandel 1973; Walker, Henning and Krettenauer 2000) but parental use can modify this relationship (Li, Pentz and Chou 2002). The impact of other persons than peers and parents is less explored. A few studies have shown that partners attempt and also succeed to influence the drinking of their partners (Hradilova Selin, Holmila and Knibbe 2009; Leonard and Mudar 2004; Wilsnack, Wilsnack and Klassen 1984), and that parents drink less in the presence of underage children, at least if they have the responsibility for the children (Raitasalo, Holmila and Mäkelä 2011). Theories and empirical studies arguing that significant others influence drinking and that peers have larger influence than parents on substance use strengthen the argument that particularly people present in a situation matter for whether a person uses substances or not. Even so, not every person who enters a situation where other people use substances will use themselves, and theories claiming to explain substance use with peer

groups only target part of the explanation. It is also questionable whether certain sub-groups need their own theories, e.g. explanations of why young people use substances cannot be so radically different from those of adults.

### *Individual explanations*

People's acts seem to be affected by external influences, but research also suggest individual explanations. This is the main focus of personality theorists (Hjelle and Ziegler 1981) and many other psychological theories (Leonard and Blane 1999). People's thoughts about the behaviour or act influence whether it is carried out or not. Expectations regarding the effects of substances have been argued to have an impact on use (i.e. expectancy theory: Jones, Corbin and Fromme 2001). These partly depend on the motives people have for using substances. Social motives have been shown to be most common in relation to drinking alcohol (Kuntsche et al. 2005), further strengthening the assumption of it being socially patterned. Underlying this assumption is the thought of people making choices, thus motives have both an emotional and a rational aspect. Out of the different choice theories, it is mainly rational choice/rational action theory (Becker 1976, 1981; Elster 1986; Skog 2000, 2003) which has been discussed in relation to substance use. It has even been argued that addictions can be rational (Becker and Murphy 1988). Earlier choices have also been suggested to be relevant for explaining why people choose to use additional drugs, as suggested by gateway theories (DuPont 1985). In relation to addiction, Ainslie argued that choices have the shape of a hyperbolic curve, i.e. that people tend to choose options which are closer in time and that they can be affected by impulsiveness, i.e. loss of self-control (2001). West and Brown, in line with Ainslie, argued that impulse and self-control matter in addition to choices (2013). Related to the perspectives of people making rational choices is therefore the self-control theory (Gottfredson and Hirschi 1990) which argued that propensity for deviant behaviours is

related to lack of self-control. Others have suggested that personality traits matter (Allsopp 1986; Erikson 1981; Kandel 1980; Little 2000; Malmberg et al. 2013; Paton and Kandel 1978; Teichman, Barnea and Ravav 1989). More medical explanations of substance use and abuse have also been proposed. Both Jellinek (1960) and Bejerot (1971, 1980) argued that alcoholism was a loss of control which had underlying physical reasons. With a further medicalization, especially the biomedical explanations have increased and a larger focus is put on neuroscientific and genetic explanations (Clarke et al. 2010; Rosenqvist and Stenius 2014). Consequently, individual characteristics also include biological factors such as genetic and neuroscientific make-up (Fromme and D'Amico 1999; Galizio and Maisto 1985; McGue 1999; Plomin et al. 2013b) and these are by some suggested to interact with other explanations (e.g. expectations: Goldman, Del Boca and Darkes 1999). The biomedicalization of the research field has been described as “the future of the sociology of deviance” (Anderson 2014, p. 519) and it has been stated that there are “biologically based efforts and innovations to “fix” those traits behaviours, and conditions now considered types of illness instead of moral failings or deviant behaviour” (Anderson 2014, p. 219). It is believed that some persons are predisposed to get addicted based on that alcohol dependence tend to run in families (Goodwin 1979; Heath et al. 1997). Adoption and twin studies have shown that some of the vulnerability is linked to genes (Edenberg and Foroud 2013), which also have been supported by more modern Genome-Wide Association studies (Li and Burmeister 2009). Thus, besides family's influence on attitudes and norms towards substances, there seems to be a biological sensitiveness for substance abuse. Still, far from all with a family background of addiction will get substance use problems themselves or even use substances at all. Considering the individual characteristics, it is further implied by research that people might have several reasons for using substances but given the same reason or motive, only some might choose to actually use a substance. Therefore, theories about motives/reasons cannot

fully explain substance use. If anything, it can be part of the content which contributes to the process resulting in people using substances. Causes, on the other hand, is rather the factors which more directly make people perceive substance use as an alternative and act on it. It is thus assumed that people at least some of the time make a deliberate choice to act. Rational choice theories contribute with action mechanisms but although substance use can sometimes be rational, which was claimed by (Becker and Murphy 1988), it does not have to be rational at all times and this might also vary depending on temporal aspects. In fact, “alcohol habits” or smoking described as a “bad habit” implies that some substance use is habitual and does not involve weighting pros and cons against each other as implied by rational choice theories. Additionally, as already stated by (Wikström and Treiber 2016), the theoretical view of rational choice does not address individual differences or the interaction between individual propensities and environmental motivators. Assuming that people make choices, whether they are habitual or rational, it is less clear what they are based on. Earlier research implies that social norms, and personal characteristics related to risk taking/self-control matter. To some extent it seems to depend on neurological explanations and genetics, but without a common theoretical framework it is hard to tell what matters most. It can also be argued that genetic aspects can help explain why some people try substances or develop dependence, but these are merely contributing and environmental and social factors have importance too (Goode 2007; McGue, Elkins and Iacono 2000; Plomin et al. 2013a).

#### *Theories considering multiple explanations*

Presented with all the possible explanations, the results might be overwhelming. Even though the reader has not been presented to all details of the theories, it should be obvious that there is a divergence of possible explanations and several characteristics have been shown to co-vary. Left with this pamphlet of explanations it becomes hard to know what matters and is

most important, i.e. to understand what causes substance use and is not merely correlations. After reviewing theories of adolescent substance use, Petraitis and colleagues similarly concluded that “understanding the causes /.../ has presented a challenge puzzle for social scientists” and that “with so many potential causes, it is difficult to form a clear picture” (Petraitis, Flay and Miller 1995, p. 67). Room has also highlighted how specifications of the causes or risk factors have wavered back and forth over time, between physical and psychological explanations, an inconsistency which might have implications on the formulation of public policies and laws intended to control substance use (1985). Many researchers regardless of discipline have acknowledged that substance use depends on both environmental and individual factors, but much research still only considers single aspects in empirical studies and few theorists have included them in a common theoretical frame and even less have considered the interaction between them or clearly defined what matters most. A few theorists have made an attempt to combine some of the elements into the same theory. Some personality theorists have acknowledged the environment as a contributing factor; e.g. Erikson’s was concerned with both the person and the environment although his main concern was on the person (1981). Yet, these theorists assume that situational factors only play a minor role in the explanation of behaviours why these components largely have been ignored in practice historically (Hjelle and Ziegler 1981). Even more recent research, using an interactionist approach, has not explained the interaction process between person and environment well.

The availability-proneness theory considers the proneness of individuals as well as the availability of substances, stating that “drug abuse occurs when a prone individual is exposed to a high level of availability” (Smart 1980, p. 46). Although the theory refers primarily to opiates it can be applicable to other substances as well. What makes a person prone is, however, not clearly defined but is described in general terms of psychological and social

proneness. The availability concept is also poorly defined, referring to how hard it is to get hold of substances regarding physical, social and economic circumstances. In 1987 a book edited by Segal was published and at first glance seemed to take the same approach as SAT given that it was named “Perspectives on person-environment interaction and drug-taking behavior”. Five perspectives were presented but these all focused on different explanations and the main conclusion of the book seemed to be that many interactions are of interest, thus not coming closer to a consistent common framework which would explain when certain factors are of importance. These theories also focused on a few elements while ignoring others. Since then, research in the area has moved forward in some sense. The PRIME<sup>iv</sup> theory of motivation suggested by West and Brown combines research from several research fields (physiological, psychological, environmental and social aspects) and concludes that all available explanations have to be considered (2013). Whereas it was first developed to explain addiction of tobacco, it is now suggested to explain addiction in more general terms. The choice to use is argued to be largely dependent on the motives but, as already stated earlier in this article, only some people will use substances even when presented with the same motive. The authors put large emphasis on impulses and inhibiting forces, stating that these always are part of explaining behaviours. This theory also seems to keep the door open to most explanations arguing that people are different. Even if that is true, the theory is insufficient in explaining the process deciding what is important and thus not very helpful when explaining substance use, but then again, it is only claimed that the theory explains addiction. A strength of the PRIME theory is that it puts emphasis on the time point when an action is happening (or being planned) (West and Brown 2013). Another theory can be found in the public health law research; the Theory of Triadic Influence (Flay 1999; Flay and Schure 2013) make claims of understanding substance use by considering its environmental, situational (interpersonal) and individual (intrapersonal) causes. While stressing the

importance of a unified theoretical framework, the theory neglects specifying which factors are most important to causation and additionally ignores the interaction between environment and person. These theories illustrate the problems also when considering multiple explanations, lacking clearly defined concepts or not giving a sufficient full description of when an interaction leads to substance use, i.e. through what process. Few theories have, additionally, been properly tested, partly because it is not always clear what needs to be tested. The overall conclusion seems to be that one explanation cannot be applied to all and that different routes lead up to people using substances.

*Further strengths and weaknesses in earlier theorizing*

Going back to the main concept of substance use, the research field have distinguished between different types of substances or between different aspects of use whereas it in this article is argued that it is not needed when explaining substance use, that the use should rather be viewed as the same behaviour but at different levels of the continuum. Radoilska (2013) mentioned that some use can be considered to break some moral rules: “addiction, by its very nature, tends to override normative considerations that would otherwise be seen as compelling” (p. 134). Similarly, Bejerot (1980) argued that addiction is always “a breach of norms” (p. 255) suggesting that use by non-addicts is not. Focusing on certain types of use e.g. problematic use or addiction can thus rather prevent us from identifying what explains substance use. Instead of focusing on the most extreme use, the normalized use should also be studied as well and preferable with the same theoretical framing and not studied as a phenomenon of its own. Some theories recognized that there are interactions between a person and the environment, but it has not been clarified what causes the use. Even theories which focused on a few explanations usually added a list of other factors which could possibly matter as well, although without clarifying when these would be important. Erikson

(1981) argued that there is no point in searching for a single reason for substance use given that there are so many underlying reasons, and that motives may vary (e.g. curiosity, peer pressure, escape from stress and philosophical rationales). It is true that motives might vary, but it can also be argued that unless a person perceives substance use as an action alternative, he/she will not use substances even if presented with the option<sup>v</sup>. In this article it is argued that a theory has to be specific in identifying the causes in order to be falsified. A step forward would therefore be to bring some order among the many explanations and to define what is important and why, furthermore to state through what process substance use comes about.

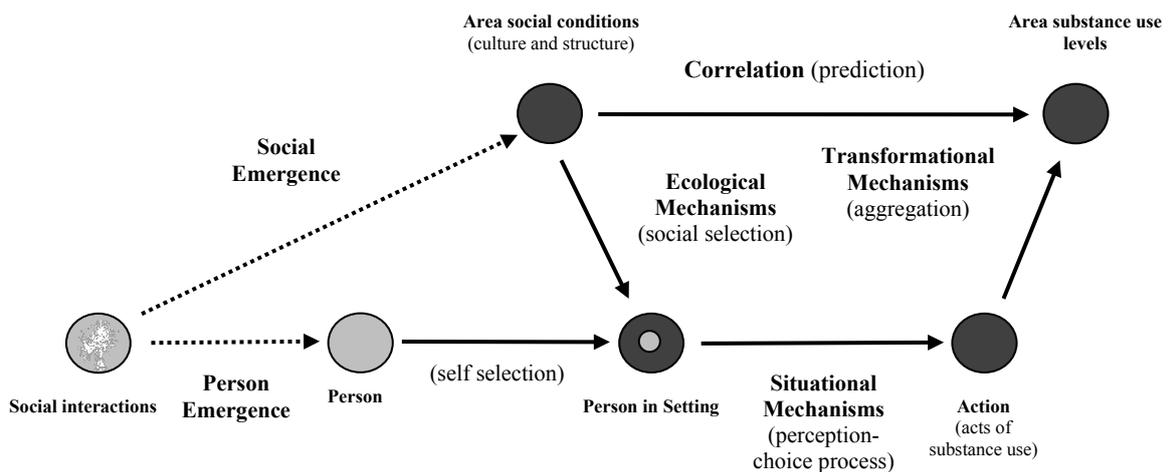
### **Explaining substance use as a situational action**

The Situational Action Theory (SAT, see Wikström 2004, 2005, 2006, 2007, 2008, 2009, 2010a, 2010b; Wikström and Treiber 2007, 2009a, 2009b) contributes with a theoretical framework which considers environmental aspects as well as individual factors. Although rare, other theories have done this as well. SAT is very specific concerning the importance of the interaction between these two when explaining why people follow or break rules of conduct. Uniquely, the theory further defines what process makes people act in certain ways. It is argued that people essentially are “rule-guided creatures” and that the social order is based on these shared rules<sup>vi</sup> which are value-based and guided by the norms in society about what is accepted behaviour under a given circumstance, who is allowed to use substances and when and where it is accepted to use them. In some situations, people breach these common rules of conduct, referred to as the act in SAT, which aims at explaining why this happens. The basic assumption of SAT is that people are the source of their actions but that the causes of actions are situational. By referring to actions as situational it is proposed that they are triggered by people processing relevant cognitive and affective input which is acquired through the person-environment interaction (Wikström and Treiber 2013). Thus, the situation

refers to the persons in a given social setting, and the action is the result of a person's propensity and the exposure to a setting increasing the risks of breaking a moral rule captured in the PEA hypothesis:  $P \times E \rightarrow A$  (Wikström 2014). The key elements of the basic situational model are then propensity (P), exposure (E), the interaction between those two ( $\times$ ) leading to the act (A). It is put forward that the act is an outcome of a person's perception-choice process ( $\rightarrow$ ) which depends on the interaction ( $\times$ ) between a person's propensity (P) for substance use and exposure (E) for settings encouraging use. This process can be either an automatic (habitual) or a reasoned (rational) process (Treiber 2011; Wikström 2006, 2014).

In relation to crimes, it was described that the moral context, the relevant moral norms or rules of the setting and their level of rule enforcement, could imply criminogenic exposure (Wikström et al. 2012), that is a setting which causes criminal behaviours. A similar concept – substancegenic – is proposed in relation to substance use. This concept intends to refer to a setting which encourages use of substances, providing a moral context which triggers use. It can be a temporary use at one occasion or a use going on for a longer period of time depending on what the rule of conduct is. As mentioned in the introduction, substances have a double character and they can interfere with a criminogenic setting by modifying it (this characteristic is not discussed in this article). Besides the environmental influence, personal characteristics or propensity influences whether substances are used. The propensity refers to individual characteristics of the person which affect the tendency to apprehend certain acts as reasonable action alternatives. The propensity in turn is suggested to depend on individuals' rules of conduct and ability to exercise self-control. People do not respond to environments in the same way and all persons do not use substances simply because they enter a moral context which includes substancegenic exposure. SAT predicts that (i) people having a personal morality (personal rules of conduct and supporting moral emotions) which encourages the use of substances, and a weak ability to exercise self-control are the people who are most likely to

drink alcohol or use other drugs, and that (ii) the environments which encourage use of substances are also the environments where these substances are most available and the moral context encourages people to consider use of substances as an action alternative. Since the theory is an interaction theory, it is further expected that the greatest consumption of alcohol and/or drugs will be observed among those persons who have the highest propensity (according to personal moral and (weaker) self-control) and additionally have the greatest exposure to environments where substances are available in a context which encourages use. Consequently, use will be more frequent under circumstances where substance use prone people are present in (immediate) environments which also encourage use of these substances.



**Figure 1.** Model of key casual mechanisms in the study of substance use causation, as suggested by the Situational Action Theory (Wikström 2011; Wikström et al. 2012), further developed from ‘Coleman’s boat’ (Coleman 1998).

The most central aspect of the model (figure 1) is the interaction between person and setting. Since it is only when substance use prone persons enter settings with high substancegenic exposure substance that use takes place, the interaction between those two elements is the focal point of the theory. This does not ignore the fact that people have personal

characteristics or earlier experiences (from own or other's use) which increase or decrease personal propensity. What a person think is right to do in a situation can vary from time to time. The theory focuses on the present moment. Earlier experiences and choices, partly resulting from selection processes, might influence how a person thinks about substances but to actually use substances is first and foremost dependent on the interaction between the person and environment (the situation). Thus, although it is acknowledged that people might have experienced events in life which have contributed to how they perceive substance use and situations, or that incidents which happened shortly before can have impact on the emotions and intentions related to substance use. These explanations are, however, perceived as secondary or as "causes-of-the-causes". The actual situation is understood to be most central; a person enters a situation with the substance specific personal rules of conduct regardless of how she/he acquired them. These rules are furthermore not likely to change fast but choices can be made based on habit as well as on rationality grounded in a preceding event. When entering a specific setting, a choice can be made that is not in correspondence to the initial intention and this contradiction can be explained by the person-environment interaction. Self-control might further influence decisions but it is proposed by SAT that the ability of self-control is important only in situations when the persons see rule breaking as an alternative and when there is a conflict between the personal morality and that of the setting (Wikström et al. 2012; Wikström and Svensson 2010; Wikström and Treiber 2007). SAT also acknowledge that the decision-making process might have neurological (Treiber 2011) and genetic basis in that they influence the ability to exercise self-control. For substance-use the predisposition of developing dependence might also influence the perception-choice process but these can be considered to be causes of the causes and will not be developed further in this article. A lot of earlier research turn to demographic differences in order to explain substance use but SAT argues that it is rather a question of self-selection processes. Even if it may look

like certain characteristics of a group explains the use, these are also rather causes of the causes.

The strength of SAT is that it provides an integrated perspective of why people use substances by paying attention to both personal and environmental characteristics arguing that focusing on the one or the other is not enough. Although the idea that human action is the result of the interaction between different types of people and different types of environments is not new<sup>vii</sup>, not many other existing theories which can be applied to substance use provide an integrated perspective like SAT. An integrated perspective is preferable when trying to explain why some people but not others engage in certain behaviours, and under what circumstances they engage in them, i.e. how people and places interact. While people are affected by their environment, their behaviours will influence the setting as well, affecting the settings by entering them. Thus, it will not be possible to separate the individuals from the settings. What SAT further contributes with is an explanation of how the interaction between persons and environments result in substance use. It is suggested that the perception-choice process, a process of interplay between a person's propensity and exposure to a substancegenic setting, precede the use. It is by perceiving substance use as an action alternative that it is possible; a situation is defined as the perception of action alternatives in response to a powerful motivator that arises from a specific person-environment interaction. A person who considers substance use to be morally wrong is therefore not very likely to use a substance even if presented with a situation encouraging use and neither is a person who considers it to be morally right but is not presented with a situation which encourage use, i.e. through people with similar morals or an environment which makes use possible. This perception-choice process is likely to be habitual under familiar circumstances with corresponding rule-guidance and involve more reasoning when the circumstances are unfamiliar or in conflict with powerful rule-guidance. Self-selection can play a role in why

people who do not see substance use as morally right are less likely to expose themselves to substancegenic settings.

## **Conclusion**

The article took a broad approach when searching for theories aimed at explaining substance use, covering both individual and environmental factors. The conclusion of the review was that Situational Action Theory fits very well with many of the earlier theories formulated about substance use. Many of the results from earlier empirical studies within the research field of substance use was in fact more in accordance with SAT than was earlier studies for crime for which the theory has found support. Whereas some theorists have emphasised the importance of considering multiple explanations in the same theory, it has not been obvious when different aspects are relevant or how they relate to each other. SAT focuses on a few core elements and relates them to each other, suggesting that actions emanate from individuals but do that through their social (immediate) environment. The substancegenic exposure depends on the rules of conduct which individuals come in contact with and although the ones which are proposed on a meso and macro level matters, it is argued that the micro level has an even greater impact. Although it might seem obvious that a theory of substance use should focus on the use (the act), most other theories do not. Instead they put emphasis on the users, resulting in a comprehensive list of possible explanations for substance use. SAT, on the other hand, is an action theory and attempt to identify when substance use occurs and what explains it. This results in a different approach to finding the causes.

The rules of conduct have a central role in SAT. When studying different theories, it became obvious that morality (which in the sociological field is equivalent to social norms) has a prominent role in all of the three theoretical types identified in this article. Regardless if these rules of conduct come from something outside the person or from within, the choice

which the person makes is made in relation to these rules which can either be followed or broken. Following that SAT is an action theory it was argued that it is in situations when substance use prone people enter substancegenic environments that they tend to use substances. Putting emphasis on the situation, the theory considers controls to be situational as well, thus being relevant only in the situations where there is a conflict between the own moral rules and the rules of the setting. This further implies that although policies and laws are acknowledged to largely matter and play an important role in limiting the harms of alcohol and other substances these are not the main causes when explaining people's substance use according to SAT. Instead, the immediate environment and the peers in that setting matters more. With that said, if the policies and laws manage to affect the immediate environment as well, e.g. by restricting availability, they can have an impact on the moral context as well as on the behaviour.

As pointed out in the part discussing interaction theories, it is often implied that there are many explanations to why people use substances. In some sense this is true; different events might have foregone peoples' substance use but the actual cause to why they use substances is emerging in the situation when people and environment interact. Thus events that happened before that, although highly relevant to why people use substances, should be seen as the causes of the causes. They can rather explain how propensities were developed and why some people are more exposed to substancegenic environments than others.

The main argument of the article was that the causes of substance use should be perceived as situational, as proposed by SAT. Although many earlier theories have tried, a true causal model which considers the interaction between environments and the people in it and also clearly defines what is being explained as well as how, when and by whom substances are used has not been presented earlier. It should be apparent that SAT does not necessarily contradict earlier theories. Instead, with a more general theory of substance use

than earlier theoretical perspectives, some of the other theories can be considered as specialized parts of the more general theory presented here. By making the assumptions made in this article it is expected that they will have an impact on how data is analysed. Following studies intend to apply a situational action approach on substance use and to test whether assumptions about the key concepts of this theoretical framing, i.e. the environmental factors, the individual and the interaction between these elements, holds true also when testing when people break (moral) rules regarding substance use. Further articles will also develop the theoretical assumptions on disparities between population groups and how a situational action approach can help explain them.

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**Notes**

<sup>i</sup> Cambridge Scientific Abstracts (CSA) on proquest.com was chosen based on the large number of databases it includes (40), including databases both from the social sciences and the medical research field.

<sup>ii</sup> Using the words: AB((theory) AND (substance OR alcohol OR drug OR narcotic) AND (use OR abuse\* OR binge OR consumption OR dependence\* OR drinking)) OR TI((theory) AND (substance OR alcohol OR drug OR narcotic) AND (use OR abuse\* OR binge OR consumption OR dependence\* OR drinking))

<sup>iii</sup> This does not ignore that there is a reciprocal relation between policies and peoples' individual views on use.

<sup>iv</sup> PRIME – Plans (P), Responses (R), Impulses (I), Motives (M), Evaluations (E).

<sup>v</sup> Erik Erikson (1981, p. 146) argued that “a person with an established sense of ego identity could resist such pressure” but that statement still implies that the person is open to the possibility.

<sup>vi</sup> It should be emphasized that seeing substance use as a moral action which is guided by moral rules does not necessarily involve any judgement of the act, and whether the act is right or wrong, but simply acknowledge that rules of conduct exists concerning the human action (Wikström et al., 2012).

<sup>vii</sup> Kurt Lewin, the father of social psychology, emphasized the importance of the whole situation (1936).

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<sup>1</sup> Titles more than two years old are available from the editors upon request.

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