



**HAL**  
open science

## Health is in the eye of the beholder: The Impact of social norms on perceived health dispositions

Raquel Bertoldo, Séverin Guignard, Lionel Dany, Thémis Apostolidis

### ► To cite this version:

Raquel Bertoldo, Séverin Guignard, Lionel Dany, Thémis Apostolidis. Health is in the eye of the beholder: The Impact of social norms on perceived health dispositions. *Swiss Journal of Psychology*, 2017, 76 (2), pp.59-70. 10.1024/1421-0185/a000192 . hal-01888420

**HAL Id: hal-01888420**

**<https://hal.science/hal-01888420v1>**

Submitted on 5 Oct 2018

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

**Authors' Preprint for Open Access**

*Manuscript accepted on 17 August 2016 for publication by the **Swiss Journal of Psychology** (Manuscript ID SJP-D-15-00051R1)*

## **Health is in the Eyes of the Beholder: The Impact of Social Norms on Perceived Health Dispositions**

Raquel Bertoldo<sup>1,2</sup>, Séverin Guignard<sup>1</sup>, Lionel Dany<sup>1,3</sup>, Thémis Apostolidis<sup>1</sup>

1. Aix-Marseille Université, LPS EA 849, 13621, Aix-en-Provence, France

2. Instituto Universitário de Lisboa (ISCTE-IUL), Cis-IUL, Lisboa, Portugal

3. APHM, Timone, Service d'Oncologie Médicale, 13385, Marseille, France

### **Acknowledgements**

The authors would like to thank Amandine Cochet and Aurélie Wasyluk for their help in data collection, and two anonymous reviewers who commented an earlier version of this paper. The preparation of this manuscript was partially supported by a doctoral scholarship of the *Fundação para a Ciência e a Tecnologia* (FCT) to the first author (SFRH/BD/62033/2009). The point of view presented in this article engages the sole responsibility of the authors.

Correspondence about this paper should be addressed to: Thémis Apostolidis,

Laboratoire de Psychologie Sociale (LPS), 29 avenue Robert Schuman, 13621, Aix-en-Provence, France. Themistoklis.Apostolidis@univ-amu.fr.

Every day, from the moment we wake up until we go to sleep, we are faced with numerous injunctions about what is bad or good for our health: What does a good breakfast consist of? How much should we sleep? Should we squeeze some sports time into an already busy schedule or should we just relax? As practices that are involved in *socially shared meanings*, our own subjective body experience and health states are based upon and express the relationships we establish with other people, the world and the social order (Herzlich, 2001). This approach enables us to understand, from a psychosocial point of view, how health practices, as eminent and complex social behaviours, are intertwined with more general social values and social functioning actualized in a specific cultural context (Stoetzel, 1960).

As a field for the expression of broader shared values and ideologies, health practices are submitted to social regulations (Apostolidis & Dany, 2012) legitimized in a western context through widely valued and shared standards associated with self-control (Joffe & Staerklé, 2007), and more globally with the neo-liberal art of governing in terms of self-modelling and social performance (Foucault, 1979; Guignard, Apostolidis & Demarque, 2014). In order to be a socially respected person, “western style requires maintaining active control over one’s desires, emotions and actions” (Joffe & Staerklé, 2007, p. 402). Consistent with this view, weak self-control over ‘body’, ‘mind’ or ‘destiny’ are triggers of negative evaluations.

Building on these ideas, we propose in this paper to explore how the assessments we make about other people’s health also pass through the lenses of our everyday set of values and norms. These cultural ideologies will be operationalized through the concept of social norms, here understood as ‘evaluative’ criteria for judging other people (Dubois & Beauvois, 2005, 2011). The effects of these judgements and thus the conformity of a target with the prevailing social norms will

be analysed through how healthy they or their behaviours are perceived to be. This analysis will be carried out in two independent studies using impression formation tasks: a first where the health of targets with different degrees of attractiveness is assessed; and a second where the health of targets with different orientations towards the future is evaluated.

### **Social norms: Driving forces of our social reality**

In social psychology, general social norms can be assessed through informal judgements we perform in our daily lives (Dubois, 2003). Informal assessments of health behaviours often draw on socially shared standards and norms. For example, the informal judgements made about skinny people have evolved from negative – when they were associated with poverty – to positive – when they became associated with charm and glamour (Le Breton, 2007), a change in informal norms that have followed the evolution of cultural values and beliefs. In general, psychosocial research on everyday normative judgements has shown that valued physical (Zebrowitz & Montepare, 2008), personality (Guignard et al., 2014) or social traits (Russell & Fiske, 2008) are important informal characteristics through which we can analyse the effects of social norms on informal judgements.

Given that psychosocial phenomena are embedded in social positioning and social participation processes, we propose in this paper to approach social norms from a sociocognitive perspective (Dubois & Beauvois, 2005, 2011). This approach focuses on unveiling the social value of adhering (or not adhering) to certain beliefs or ideas so widely shared that people rarely recognize supporting them – even if the non-adherence to these beliefs or ideas is experienced and justified as a normative breach (Testé, 2003). Since this approach focuses on demonstrating how broader social

norms can drive the expression of certain beliefs and leanings as if they were part of a personal choice, sociocognitive research has essentially focused on the expression of interpersonal judgment (Dubois, 2003). In terms of the norm focus approach (Cialdini, 2003), judgement norms are closer in meaning to *injunctive* norms, despite their undeniably *descriptive* consequences (Dubois, 2003). For example the hypothesis that a psychological construct such as internality is based on a valued social norm – and not on a cognitive bias – in western societies, has been extensively studied under this approach (Dubois, 2009; Dubois & Beauvois, 2005).

Social norms are thus understood as part of a widely shared ideological basis for interpersonal judgement on a series of characteristics, including health dispositions and behaviours. In this paper we propose that the power of these social norms draws in part on the broad and *implicit* influence operated by everyday ideologies on social health-related judgements naturally performed in interpersonal situations, where people displaying certain physical characteristics (for example being ugly or fat) tend to be devalued, especially in formal settings (Pansu & Dubois, 2002). Considering these ideologies as often implicit guides (Testé, 2003) as to what is considered healthy or not, they can be studied through impression formation tasks where the variable being tested is unknown to the participant.

The idea that specific judgements embedded in social norms and broader cultural ideologies of our western societies can influence the health states projected onto people displaying some critical characteristics will in this paper be developed through two independent studies. The first study will show how health assumptions are made on the basis of a physical trait, such as attractiveness (Dion, Bersheid, & Walster, 1972); while the second study will shed light on health assumptions based on a psychological trait in relation to a target's Future Time Perspective (Zimbardo &

Boyd, 1999). The literature supporting the idea that (1) physical and (2) psychological traits influence interpersonal judgements in general will be presented below.

### **The normative implications of appearance and looks**

Since the Ancient Greeks, beauty has been associated with positive qualities (Macrae & Quadflieg, 2010), suggesting that we do judge a book by its cover. Attractive people are treated better (Leeuwen & Macrae, 2004), judged to be more qualified (Maisonneuve & Bruchon-Schweitzer, 1999), more competent (Dion et al, 1972) and more socially desirable (Dion & Dion, 1987) than their less attractive counterparts. For instance, in a selective process, attractive people are preferred over others holding equivalent qualifications (Pansu & Dubois, 2002), suggesting that beauty is generally associated with success, wealth and happiness.

Evolutionary psychology has established that some physical features associated with physical attractiveness – e.g., waist-to-hip ratio (Singh & Young, 1995), body size and shape, symmetry and gender-typical hormonal markers (Weeden & John Sabini, 2005), and facial cues (Zebrowitz & Montepare, 2008) – could be reliable indicators of a person's healthiness. However, criteria for *perceiving* attractiveness and beauty are seen to vary greatly both historically and contextually (Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Rumsey & Harcourt 2005; Yang & Lee, 2014), and to differ widely when combined with other characteristics such as social and intellectual competence, integrity and concern for others (Eagly, Ashmore, Makhijani, & Longo, 1991).

In brief, previous studies distinguished between 'beauty' as understood in evolutionary terms and 'attractiveness', which is socially constructed and contextually meaningful (e.g., Cunningham, et al., 1995). As for the context of western cultures,

attractiveness criteria involve a lifestyle of mastery over one's body, which can also be associated with a 'self-control ethos' (Joffe & Staerklé, 2007). From this point of view, social groups that fail to meet those control standards (e.g., persons who are fat, ugly, dirty or simply misbehaving) are socially devalued on the basis of a lack of control over their body, which also reflects a more generalized lack of control, that over their own destiny. Thus, following this rationale, in the same way that socio-symbolic processes intervene in judging others on the basis of appearance, they could also intervene in judgements based on psychological characteristics, as we will see below.

### **The normative implications of being future-oriented**

Besides the relationships we maintain with our own bodies and those of other people, the effects of self-control ideologies on interpersonal judgement can also be observed through psychological characteristics associated with one's anticipation and 'destiny control' (Joffe & Staerklé, 2007). Social norms and cultural values are implicit in the way we experience psychological time, and particularly the future (Zimbardo & Boyd, 1999). Indeed, combined with the capacity for self-sustainability and for long-term planning, the ability to manage one's future time efficiently lies at the heart of western contemporary expectations (Foucault, 1979; Guignard et al., 2014). It is no surprise then that Future Time Perspective (FTP), a temporal frame which is characterized by planning and achievement of goals, expectation and anticipations of future rewards and by following conventions (Zimbardo, Keough, & Boyd, 1997), was identified as being a social norm in different European countries (Guignard, Bertoldo, Goula, & Apostolidis, 2015).

From a sociocognitive point of view, the fact that individuals assume valued ideas or positions in a given society can be associated with attributions in terms of social utility (e.g., dynamic, ambitious, etc.) and/or desirability (sympathetic, sincere, etc.) (Dubois & Beauvois, 2005). Other similar dimensions have also been proposed as basic factors of interpersonal perception, as for example: agency (competent, efficient, clever, etc.) vs. communion (sincere, honest, fair, etc.) (Abele & Wojciszke, 2007); competence (capable, intelligent, efficient, etc.) vs. warmth (good-natured, sincere, friendly etc.) (Fiske, Cuddy, Glick, & Xu, 2002); amongst others.

Despite the interest and seeming correspondence of all these dimensions, the sociocognitive approach places at the heart of its definition of what is socially normative the fact that a characteristic is regarded as ‘socially useful’ – therefore *implicitly* expected for the maintenance of the status quo (Dubois & Beauvois, 2011). Within this approach, social utility corresponds to the ‘market value’ of an individual with regards to social functioning (Cambon, 2006), whereas social desirability reflects the ‘likeability’ which one can attribute to a person in his/her relationships with others (Dubois & Beauvois, 2005). In terms of interpersonal judgements, studies developed in this field have not yet explored the association of the dimensions of social utility and desirability with the health behaviours or states attributed to a target.

### **Synthesis and scope**

Based on the above-mentioned ideas that physical and psychological traits can influence interpersonal judgements in general, this paper aims to demonstrate that they can particularly influence *health* judgements. This psychosocial attempt to unveil the normative components of health issues aims to contribute to the development of a critical approach to health (Murray & Poland, 2006). This analysis approaches health



states as a social construct, reflecting and expressing a normative configuration specific to a cultural context, and in relation to a broader social functioning (Apostolidis & Dany, 2012). In other words, the perception of risks associated with healthy or unhealthy states often resorts to criteria that are drawn from shared symbolic backgrounds in contemporary western societies (Joffe, 1999).

This proposal will be illustrated through two independent quasi-experimental studies, in which diverse contexts and different methodological settings aim to demonstrate the power of cultural ideologies and social norms in guiding our judgements of other peoples' health dispositions and behaviours. Based on the self-control ethos with regard to its dimensions of control over one's body and destiny (Joffe & Staerklé, 2007), the two studies here presented aim to demonstrate, by drawing on socially valued information from the dominant normative perspective – either a target's attractiveness or a target's future time perspective –, that an analogous sociocognitive process is at work when other people's health is assessed. These processes express an implicit everyday logic of the construction of health based on the idea that which is more socially valued is also healthier.

### **Study 1 – Physical attractiveness & health perception**

This study focuses on extending the analysis to how health inferences are made just by perceiving another person as attractive or not. In other words, we explore how attractiveness is informative of a person in front of us, what automatically involves gender assumptions and representations (Flores-Palacios, 2001) – and who (man or woman) is attractive to whom. Extending the premise of 'what is beautiful is good' (Dion et al., 1972) to the perception of health, this quasi-experimental study aims at exploring whether people resort to the perception of

attractiveness, considering it as a socially valued indicator, in order to infer someone else's health state.

Three pictures of either men or women with different levels of attractiveness were proposed for judgement in terms of perceived health. Based on the negative effects of a weakened self-control over one's body, we expected that attractive people (men and women) would be judged overall as healthier than unattractive people. Moreover, considering the significant gap between the ideologically based gender expectations (Flores-Palacios, 2001), we also expected to find differences between specific health issues that are commonly associated with men or women.

## **Method**

### **Participants**

Participants were 192 students (96 male and 96 female), mean age 21.7 ( $SD = 2.9$ , 17-35), from Aix-Marseille University.

### **Procedure**

Participants were required to answer a questionnaire at the university's library, where they were randomly assigned to evaluating male or female pictures. Then, three pictures with different attractiveness levels (unattractive, moderately attractive and attractive) were randomly presented to them<sup>1</sup>. Afterwards, participants were asked to rate each target's perceived health, socioeconomic status, future life events (e.g., will s/he have a divorce in the future; will s/he be a good mother/father, etc.), and satisfaction with their own appearance. Considering the study's focus on analysing the construction of health judgements, only the first item of this set (perceived health) will be analysed.

---

<sup>1</sup> Available upon request to the corresponding author.

In a second step, participants were asked to choose which of the three targets they thought to be more vulnerable to a series of illnesses (e.g., sexually transmitted diseases, cancer development), before finally providing demographic data.

### **Target manipulation**

In order to select material presenting normative features, a series of pictures was pre-tested for perceived attractiveness. Twenty-two pre-selected pictures of females (11 pictures) and of males (11) were presented to 60 undergraduate students (30 male and 30 female), who were requested to judge the pictures in terms of their perceived beauty, charm and attraction. Based on the mean values of these three scales, three male and three female targets were chosen: attractive target ( $M_{(\text{attractiveness})} = 7$ ), moderately attractive target ( $M_{(\text{attractiveness})} = 5$ ) and unattractive target ( $M_{(\text{attractiveness})} = 2$ ).

### **Instruments**

*Perceived health.* Five 6-point bipolar items were proposed to judge the target's perceived health: 'in strong/poor health', 'not ill/ill', 'takes/does not take care of his/her health', 'in good/bad physical health' and 'in good/bad psychological health'. Items had a reliable internal consistency ( $\alpha = .90$ ) and were averaged in a single health indicator.

*Target choice on the basis of perceived health.* Targets were compared on their vulnerability to a series of physical and psychological positive and negative health attributions. Examples of questions asked in this part include: 'which person seems in better shape?', 'which person is at higher risk of contracting a sexually transmitted disease?' and 'which person is more at risk of developing cancer?'

## Results

### Perceived health

A 2\*2\*3 mixed ANOVA was performed on the ratings of perceived health of each of the three targets. Between-subject variables included the gender of the target and that of the participant. Attractiveness level (unattractive, moderately attractive and attractive) was a within-subject variable. A main effect of attractiveness level was found on the target's perceived health ( $F(2,344) = 15.6, p < .001, \eta_p^2 = .08$ ). No effect of participant or target gender were found.

This main effect of attractiveness level shows that the more attractive the target, the healthier they were judged to be, as can be seen in Figure 1 ( $M_{(\text{unattractive})} = 3.2, M_{(\text{moderately attractive})} = 4.4, M_{(\text{attractive})} = 4.6$ ). A contrast analysis reveals that the attractive target is seen as significantly healthier than the unattractive target ( $F(1,172) = 249.5, p < .001, \eta_p^2 = .59$ ), and to a lesser extent, healthier than the moderately attractive target ( $F(1,172) = 15.7, p < .001, \eta_p^2 = .08$ ).

\*\*\* Insert Figure 1 about here \*\*\*

These results provide evidence for your hypothesis stating that what is beautiful is regarded as healthier. They also show that the main decrease in perceived health occurs when the target is *not* attractive and not when they are moderately attractive. It may indicate that more than being attractive, it is the lack of attractiveness that is a distinguishing feature in terms of health assessment.

### Target choice on the basis of perceived health

From the targets presented, participants were also required to choose those they perceived to be healthier (positive health attributions) or more vulnerable

(negative health attributions) to a series of health issues. A series of log-linear analyses were performed to estimate how the different factors (target gender, participant gender and attractiveness level) influence the attribution of either positive health attributions or negative health conditions (Table 1).

Analyses made on the characteristics most associated with *positive health attributions* showed a main effect of attractiveness level (all  $ps < .01$ ) and an interaction between attractiveness level and gender of target (Table 1). No effect of participant gender was found. In order to better understand these results, separate chi-square tests were performed on tables considering (1) only the level of attraction and (2) the interaction with gender of target (Table 1). Results show that attractive targets were rated healthier only when they were *males*. In fact, the male attractive target was rated as the healthiest by 67.7% of participants ( $p < .05$ ), as the most careful about their health (47.8%,  $p < .05$ ) and as the one who 'felt good about themselves' (71.9%,  $p < .06$ ). Among female targets, it was the *moderately attractive* that systematically got the better ratings: they were chosen as the healthiest by 50% of participants ( $p < .07$ ), as the most careful about their health (57.3%,  $p < .05$ ) and as the ones who felt most 'comfortable with themselves' (44.8%,  $p < .05$ ).

**\*\*\* Insert Table 1 about here \*\*\***

Analyses made of *negative health attributions* also show a significant main effect of attractiveness level (all  $ps < .05$ ) and an interaction between attractiveness level and gender of target (Table 1). Regarding the item 'which of these people is more likely to carry a disease', only a main effect of attractiveness level was found. So as to better understand these results, separate chi-square tests were performed on

the tables considering (1) only attractiveness level and (2) attractiveness level plus target's gender (Table 1).

Results show that overall, negative health attributions were made to unattractive targets. Irrespective of gender, the unattractive target is considered by 75% ( $p < .001$ ) of participants to be more likely to carry a disease; for 40% ( $p < .05$ ), at higher risk of having an infarct; for 49.5% ( $p < .001$ ), at higher risk of developing cancer; for 77.9% ( $p < .001$ ) they are the ones that are more often ill and for 64% ( $p < .001$ ), they are the ones at higher risk of psychological distress.

Even if these results clearly associate the (lack of) attractiveness with a perception of higher health risk, some health issues are differently attributed to more or less attractive targets depending on gender. For instance, 69.8% of participants associate a risk of contracting sexually transmitted diseases with an *attractive* target which is female, and only 41.5% with one which is male ( $p < .05$ ). The same holds true for psychological distress, which is attributed by 33.3% of participants to an attractive target which is female, and only by 8.4% to one which is male ( $p < .01$ ).

On the other hand, specific illnesses are more associated with the attractive male target: 41.9% of participants tend to associate the risk of infarct with it, while only 26% do so when the target is female ( $p = .08$ ). Also, 33.7% considered the attractive male target to be at a higher risk of developing cancer, while only 14.6% did so for attractive female targets ( $p < .05$ ).

## **Discussion**

These results provide a demonstration of how culturally driven assumptions related (but not restricted to) one's appearance can significantly influence assessments we make about other people's health states. The results are in line with our initial

expectations by showing that more attractive targets are also considered to be healthier (Figure 1). More specifically, regarding differences between targets, the greatest decrease in perceived health was observed between the moderately attractive and the unattractive targets, suggesting that *lack* of attractiveness might act as a salient feature impacting a target's health perception. This 'penalty' of the non-attractive target in terms of perceived health is sound in terms of negative stereotypes attributed to people that lack control over their bodies (Staerklé & Joffé, 2007) – or who at least do not make an effort to improve their appearance despite their natural gifts.

These findings are further clarified by the results of the second task where targets were chosen on the basis of their perceived health (Table 1). In line with the above-mentioned results, attractiveness was generally associated with positive health dispositions, being thus considered as a health-protective characteristic from a social standpoint. Also, negative health conditions were systematically associated with unattractive targets, irrespective of gender.

But given that this societal logic is unavoidably contextualized by gender relations, a different order of analysis is called for. Interestingly, some specific health vulnerabilities were attributed to attractive targets – sometimes male (risk of infarct) and sometimes female (risk of contracting a sexually transmitted disease) (Table 1). These results suggest that being attractive holds different meanings according to gender. For instance, attractive women are, to a much greater extent than men (69.8% against 41.5%) seen as more vulnerable to sexually transmitted diseases, implying a sexual morality that 'condemns' women – simply on the basis of being attractive – more than men. These results illustrate how gendered social relations developing in a

sexual context end up actualizing the shared socio-symbolic relational matrices that govern them.

These judgements were equivalent for male and female participants. The fact that this rationality is shared across genders further suggests that social information such as someone's attractiveness, as well as gendered expectations, is socially shared at the level of our ideological references, i.e. the cultural matrix from where we draw meaning for interpersonal and intergroup inferences in everyday life.

Our results illustrate how health perception also constitutes an arena where broader cultural frames become active 'guides' for our assessment of other people's health. So as to further explore how normative features become important criteria for assessing other people's health, we will present a second study in which the socially valued characteristic used to address a target's health was their 'control over destiny', or of the future.

## Study 2

In their analysis of FTP as a social norm, Guignard et al. (2014) highlighted a strong relationship between FTP and 'social utility' value but no relation with 'social desirability' value. And since social utility indicates that a construct is normative in a given society, FTP can be considered as a social norm. Regarding this normativity as anchored in broader ideological expectations related to the 'homo-oeconomicus' as a way of governing all areas of social and private life (Foucault, 1979), we anticipate that people ranking high in relation to their 'destiny control' will implicitly be attributed healthier behaviours.



In this quasi-experimental study, the effect of perceived FTP on health related judgements will be explored by resorting to a similar impression formation task to that used in Study 1. This study's goal is to examine whether the social valorisation of FTP influences a target's perceived health behaviours. If it does, we will also perform a multiple mediation analysis (Preacher & Hayes, 2008) so as to identify *which* social value (social desirability or social utility) most actively influences the relationship between FTP and the attribution of health behaviours.

Based on the general assumptions of the self-control ethos, we hypothesize that a high-FTP target will also be seen as performing healthier behaviours than a low-FTP target. And considering the normative nature of FTP to draw upon social utility value, we also expect this value (and *not* social desirability) to mediate the relationship between a target's perceived FTP and the health behaviours attributed to them.

## **Method**

### **Participants**

Two-hundred-and-thirteen participants (91 male and 122 female) from Aix-Marseille University completed a questionnaire. Participants were 20.4 years old on average ( $SD = 3.59$ , 18-44) and were evenly distributed across experimental conditions.

### **Procedure**

Participants received a booklet with instructions on the first page. The second page contained the French validated version of the FTP scale (Apostolidis & Fioulaine, 2004; 12 items, i.e.: "I am able to resist temptations when I know that there is work to be done", "it upsets me to be late for appointments", "I

complete projects on time by making steady progress”) containing the manipulated responses of a target with high or low FTP. Participants were then required to give a picture of the target-person whose answers they were about to judge in terms of health behaviours, social desirability and utility.

After they read the FTP responses of the target and before they judged them, participants were asked to rate the target’s perceived level of FTP using three items from the validated French version of the Future Consequences Scale (CFC) – for example “I often engage in a particular behaviour in order to achieve outcomes that may not result for many years” (Demarque, Apostolidis, Chagnard, & Dany, 2010). Five participants failed to give appropriate answers to this manipulation check and were dropped from the initial sample. In the end, 208 participants were retained for analysis.

### **Target manipulation**

The manipulation of targets’ future time perspective (FTP) consisted in presenting participants with two FTP scales (Zimbardo & Boyd, 1999) supposedly answered by a student. One questionnaire presented a target with high levels of FTP and the other, a target with low levels of FTP. These manipulations were based on a previous study where participants completed the Zimbardo FTP scale (Apostolidis, Fieulaine, Simonin, & Rolland, 2006). From these results ( $M = 3.18$ ,  $SD = .60$ ), two standard deviations were subtracted to create the low-FTP target ( $M_{(low-FTP)} = 1.75$ ) and two added to the high-FTP target ( $M_{(high-FTP)} = 4.25$ ) condition. To render the manipulation more credible, the questionnaires were completed manually.

Besides their FTP score, the target was presented as a university student whose age (21 years-old) and name (Pierre/Léa) were visible. Thus, this study

consisted in a 2 (high-FTP/low-FTP) X 2 (target gender: male/female) between-subjects design.

### **Instrument**

*Health behaviours.* Participants were asked to what extent they agreed that the target presented several health behaviours from 1 (*totally disagree*) to 7 (*totally agree*). Behaviours included smoking (reversed), having a balanced diet, drinking alcohol (reversed), regularly attending medical check-ups, smoking cannabis (reversed), being vaccinated and systematically using condoms in sexual relations.

These items were submitted to a factorial analysis that yielded a unifactorial solution explaining 53.3% of item variability (KMO = .85; Bartlett's test of sphericity:  $\chi^2 = 561.2, p < .001$ ). The items were then averaged into a single general health indicator ( $\alpha = .87$ ) where higher scores meant healthier behaviours, and lower scores, less healthy behaviours.

*Social utility and desirability.* Adjectives previously identified as indicative of social utility and social desirability value dimensions were used (Cambon, 2006). For social utility, three positive (dynamic, ambitious, and hardworking) and three negative traits (naive, shy and emotional) were averaged into a single indicator ( $\alpha = .65$ ). For social desirability, three positive (sympathetic, sincere and nice) and three negative traits (selfish, pretentious and hypocritical) were averaged into a single indicator ( $\alpha = .70$ ). Participants indicated whether they thought that trait was characteristic of the target from 1 (*not at all*) to 7 (*very much*). The two scales were not correlated (Person  $r = .02, p = .75$ ).

## Results

A 2\*2\*2 between-subjects ANOVA was performed on the aggregated measure of health behaviours attributed to the target. Independent variables included the participant's gender, the target's gender and FTP level (low or high FTP). The analysis showed a main effect of the FTP level ( $M_{FTP+} = 4.89$ ;  $M_{FTP-} = 3.24$ ;  $F(1,200) = 165.2$ ,  $p < .001$ ,  $\eta^2 = .45$ ) and an effect of the participant's gender ( $M_{female} = 4.21$ ;  $M_{male} = 3.91$ ;  $F(1,200) = 4.8$ ,  $p < .05$ ,  $\eta^2 = .02$ ) on attributed health behaviours. No further effects were significant. These results confirm our expectations about the role that FTP, as a normative psychological construct, would play in the attribution of health behaviours: the higher the target's FTP, the healthier were the behaviours attributed, thus confirming once again the social logic behind health perception.

Since the role of FTP in the attribution of health behaviours was demonstrated, we now propose to identify which of the social values (social desirability or social utility) are most active in this relationship.

## Multiple Mediation Analysis

In order to assess which of the social values are more fundamentally called on in the association between FTP and health perception, a multiple mediation analysis was performed (Preacher & Hayes, 2008). Mediation analyses are interested in the process (mediators) through which one variable exerts influence over another. Procedures proposed by Baron and Kenny (1986) do not allow for testing more than one mediator at a time, increasing the possibility of shared variance with other variables in the model leading to biased parameter estimates – the ‘omitted variable’ problem (Judd & Kenny, 1981). In short, “testing the total indirect effect of X on Y is

analogous to conducting a regression analysis with several predictors, with the aim of determining whether an overall effect exists” (Preacher & Hayes, 2008, p. 881).

The multiple mediation analysis was performed by resorting to the PROCESS macro for SPSS (Hayes, 2015). The independent variable was considered to be FTP manipulation (dummy variable 0 = FTP-; 1 = FTP+), the dependent variable was the measure of health behaviour attributed to the target. The mediators were the social utility and social desirability attributed to the target (see Figure 2).

**\*\*\* Insert Figure 2 about here \*\*\***

Consistent with our previous results, FTP has a positive and significant effect on health perception – i.e. the behaviours attributed to the high FTP target are healthier than those attributed to the low FTP one ( $R^2_{Adj} = .46$ ,  $F(1,206) = 170.44$ ;  $p < .001$ ; Figure 2). This total effect is slightly reduced when the indirect effects are taken into account (Table 2): social utility significantly contributes to the model as a mediator ( $SE = .142$ ), while social desirability does not ( $SE = .019$ ) – see confidence intervals presented on Table 2.

**\*\*\* Insert Table 2 about here \*\*\***

These results indicate the existence of a *partial* mediation of FTP manipulation on the attribution of health behaviours – since the direct effect of FTP on health behaviour perception continues to be significant even when the influence of moderators is taken into account. These results are therefore in line with our

expectations: the manipulation of FTP influences the attribution of health also (but not only) by positively affecting the social utility value (see Table 2).

## **Discussion**

As expected, FTP, as socially valued information, plays a positive role in the assessment of a target's health: the future oriented target (FTP+) is seen as performing healthier behaviours than a target that is not. It is true that being future oriented is positively associated with the performance of health behaviours (e.g. Adams, 2009). But our interest was not in identifying whether individuals are aware that others who anticipate future health problems also avoid risky future consequences. Our goal was to clarify whether we can implicitly consider someone as presenting healthier behaviours *simply* by seeing him/her as future oriented.

These results present an interesting demonstration of this phenomenon by also clarifying one of the paths followed by this social logic: The FTP influence of perceived health behaviours was partially mediated by social utility – and not by social desirability value. These mediational findings suggest that the relationship between FTP and health behaviour attributions is not only a direct one: FTP *also* has a positive influence on the perception of health behaviours through the activation of social utility. We must be careful though in interpreting these results: only a part of FTP's effect is mediated by social utility, the direct effect of FTP on health perception remains significant.

Therefore, a profile that is future oriented is also seen as socially useful, which elicits the perception of healthier behaviours. According to Beauvois (2003), social utility reflects our knowledge about an individual's chances of success or failure in social life correlated with the extent to which s/he matches social

expectations from his/her environment. These results demonstrate how a normative logic, anchored in the dominant ideology of the ‘homo-oeconomicus’ model (Foucault, 1979), is active in the perception of health behaviours through, in the case of this study, the perception of a high orientation towards the future.

These findings invite us to conduct a deeper analysis of how broader cultural ideologies are (also) active in the attributions we make in our everyday lives about health dispositions. They thus provide an interesting illustration of how broader social norms, through the attribution of social utility (and not social desirability), are actualized in the mundane judgements we (also) make in the health domain.

### **General Discussion**

The two studies presented above converged in their demonstration of a similar social logic founding the construction of health dispositions and behaviours. More concretely, this social logic can be found in everyday informal situations where fragments of information available and valued by the dominant social order (e.g., attractiveness and time-orientation), are used as ‘guides’ to infer individual health states and anticipate health behaviours. Thus, our findings provide new empirical evidence about the existence of complex sociocognitive functioning when analysing the role of cultural ideologies and social norms in guiding our judgements of other peoples’ health dispositions and behaviours.

In Study 1, we showed attractiveness to be implicitly associated with health dispositions in general. On the whole, participants judged an attractive target as healthier than a non-attractive one. But this overall logic when applied to a single person inevitably involves gender issues. And this widely shared logic was seen to

differ when the targets' gender is considered: attractive men are seen at higher risk of infarct, while attractive women are seen at higher risk of contracting a sexually transmitted disease. These results provide an important illustration of how our shared socio-symbolic relational matrices govern, and are activated through gender social relations taking place in a sexual context. Accordingly, wider cultural expectations discussed in this paper are contextualized by gender-related ideologies.

In the second study, we have illustrated how the simple availability of information about someone's FTP orientation is sufficient to trigger judgments about his/her health behaviours. Results showed that a target presenting high FTP is seen as behaving in a more healthy way than a target presenting a low FTP. The normative character of these judgements based on FTP perception could moreover be demonstrated through a partial mediation of the FTP effect on health perception by *social utility*. Considering the importance of the utility value in the reproduction of a given societal structure (Beauvois, 2003), this result illustrates once again how what is regarded as socially adapted, fit to the so-called 'technologies of the self' by which individuals constitute themselves within and through systems and strategies of power (Foucault, 1979), contributes to the construction of health status as socially meaningful.

These two independent studies, using different methodological settings (the first a quasi-experimental mixed design with analysis of categorical output variables and the second, a quasi-experimental inter-subject design using only quantitative variables); and in different contexts (attractiveness and time perspective), are an invitation for a more systematic analysis of how information that is valued within the framework of our dominant ideology influences health care and evaluation – what, if demonstrated, the concrete consequences of reproducing these ideologies show.



This perspective also offers a new approach to an increasing literature about social normative influences on health behaviours (Mollen, Ruiter, & Kok, 2010). The analysis of how cultural ideologies activate the valorisation of specific habits and health dispositions concretely means that, more than individual-level variables (weight, height, appearance, ethnicity, etc.), we must take into account a broader societal level, where the valuation or devaluation of certain characteristics informs us about a dominant set of values and norms. This perspective allows us to consider, as was very early suggested by Stoetzel (1960), that the ontological nature of health and illness as psychosocial states is that they may be so extremely intertwined with the general worldview for a given society, that they end up being indistinguishable.

In a more applied perspective, preventive health messages could take special advantage of such analysis. Indeed, preventive messages are informative not only about health. They also convey normative information about *what* one should do and *how* one should act. During this communicative process, normative dimensions can greatly impact the reception of health messages by different audiences. Normative concerns can help understanding; for instance, risk denying strategies used by certain groups involved with risky behaviours (Apostolidis et al., 2006). Therefore, preventive and health-promoting institutions could take into account these findings in order to examine their interventions from a new perspective, by also taking into account the normative aspects of their proposals. It would allow them to improve the efficiency of health campaigns among specific populations by avoiding interventions with strong normative contents and developing more interventions focused only on objectified health states.

To conclude, the present findings show the relevance of a socio-constructivist approach for revealing the deep social embedment of health states and

health assessments. Thus, the health states of others appear as a social construction drawn from a system of socially regulated knowledge intertwined with social functioning. This paper intended to contribute to the extensive critical reflection about health as an institution (Massé, 2001). More precisely, we wanted to provide findings that stimulate the reflection about normative aspects of health issues in everyday life, considering that being seen as more or less healthy can also be related to positioning oneself in conformity or deviance with social norms and, thus in relation to the social order.

This type of studies constitute a way of understanding how people come to regulate or anticipate their health conditions in relation to dominant social norms (Blood, 2005), and how they help to validate and maintain social norms. The concept of normalisation (Foucault, 1977) is a useful heuristic for the understanding of occurring processes. Normalisation helps us to understand how individuals measure, judge, discipline and 'correct' their behaviour and ways of thinking in order to cope with or anticipate their own health conditions. This 'inspecting gaze' (Foucault, 1977) takes place with regards to social norms that legitimate self-examination, self-discipline and - as we pointed out in this contribution - the evaluation of others.

Thus, health as a social construct seems to be profoundly affected by normative concerns contained in reproduced lifestyles (appearance, attitudes and values) among society by individuals and groups (Murray, Pullman, & Rodgers, 2003). This underlines the importance of a deeper understanding of the cultural, normative and ideological roots of health beliefs and judgments, which yet seems to have little to do with health issues *per se*. These concerns include, but are not restricted to, being attractive or being oriented toward the future, which puts coercive and normative pressure on individuals to constitute themselves within and through

systems and strategies of power in the specific socio-historical context of our contemporaneity.

### References

- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology*, *93*(5), 751–63. doi:10.1037/0022-3514.93.5.751
- Adams, J. (2009). The role of time perspective in smoking cessation amongst older English adults. *Health Psychology*, *28*(5), 529–534. doi: 10.1037/a0015198
- Apostolidis, T., & Dany, L. (2012). Pensée sociale et risques dans le domaine de la santé : le regard des représentations sociales. *Psychologie Française*, *57*(2), 67–81. doi:10.1016/j.psfr.2012.03.003
- Apostolidis, T. & Fieulaine, N. (2004). Validation française de l'échelle de temporalité: The Zimbardo Time Perspective Inventory (ZTPI). *European Review of Applied Psychology*, *54*, 207–217.
- Apostolidis, T., Fieulaine, N., Simonin, L., & Rolland, G. (2006). Cannabis use, time perspective and risk perception: Evidence of a moderating effect. *Psychology & Health*, *21*(5), 571–592. doi:10.1080/14768320500422683
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/3806354>
- Beauvois, J.-L. (2003). Judgment norms, social utility, and individualism. In N. Dubois (Ed.), *A sociocognitive approach to social norms* (pp. 123–47). London: Routledge.
- Blood, S. K. (2005). *Body work*. London: Routledge.
- Cambon, L. (2006). La fonction évaluative de la personnologie, vers la mise en évidence de deux dimensions de la valeur: La désirabilité sociale et l'utilité sociale. *Psychologie Française*, *51*, 285–305. doi:10.1016/j.psfr.2006.01.003
- Cialdini, R. (2003). Crafting normative messages to protect the environment. *Current Directions in Psychological Science*, *12*, 105–9.
- Cunningham, M. R., Roberts, A. R., Barbee, A. P., Druen, P. B., & Wu, C. H. (1995). Their ideas of beauty are, on the whole, the same as ours': Consistency and variability in the cross-cultural perception of female physical attractiveness.

*Journal of Personality and Social Psychology*, 68(2), 261-279.  
doi:10.1037/0022-3514.68.2.261.

- Demarque, C., Apostolidis, T., Chagnard, A., & Dany, L. (2010). Adaptation et validation française de l'échelle de perspective temporelle « Consideration of Future Consequences » (CFC). *Bulletin de Psychologie*, 63(5), 351–360.  
Retrieved from:  
[http://www.cairn.info/zen.php?ID\\_ARTICLE=BUPSY\\_509\\_0351](http://www.cairn.info/zen.php?ID_ARTICLE=BUPSY_509_0351)
- Dion, K. L., & Dion, K. K. (1987). Belief in a Just World and physical attractiveness stereotyping. *Journal of Personality and Social Psychology*, 52(4), 775–780.  
doi: 10.1037/0022-3514.52.4.775
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24(3), 285–290.
- Dubois, N. (2003). The concept of norm. In N. Dubois (Ed.), *A sociocognitive approach to social norms* (pp. 1–15). London: Routledge.
- Dubois, N. (2009). *La norme d'intériorité et le libéralisme* (Rev. Ed.). Grenoble: Presses Universitaires de Grenoble.
- Dubois, N., & Beauvois, J.-L. (2011). Are some rabbits more competent and warm than others? *Swiss Journal of Psychology*, 70(2), 63–73. doi:10.1024/1421-0185/a000040
- Dubois, N., & Beauvois, J.-L. (2005). Normativeness and individualism. *European Journal of Social Psychology*, 35, 123–146. doi: 10.1002/ejsp.236
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but...: A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110(1), 109–128. doi: 10.1037/0033-2909.110.1.109
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2002). A Model of ( Often Mixed ) Stereotype Content : Competence and Warmth Respectively Follow From Perceived Status and Competition. *Journal of Personality and Social Psychology*, 82(6), 878 –902. doi:10.1037//0022-3514.82.6.878
- Flores-Palacio, F. (2001). *Psicología social y género; El sexo como objeto de representación social*. Ciudad de México: Ed. Mc Graw Hill/DGAPA.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. New-York: Random House.
- Foucault, M. (1979). *Naissance de la biopolitique : Cours au collège de France*. Paris: Seuil.
- Guignard, S., Apostolidis, T., & Demarque, C. (2014). Discussing normative features of Future Time Perspective construct: Renewing with the Lewinian approach from a sociocognitive perspective. *New Ideas in Psychology*, 35, 1–10.  
doi:10.1016/j.newideapsych.2014.04.001

- Guignard, S., Bertoldo, R., Goula, K., & Apostolidis, T. (2015). Looking to the future for being well-seen: Further evidences about the normative feature of the future time perspective. *Revue Internationale de Psychologie Sociale*, 28, 7-23.
- Hayes, A. F. (2015). *The PROCESS macro for SPSS and SAS*. Accessed on 25 September 2015. Available at <http://www.processmacro.org/>.
- Herzlich, C. (2001). Les représentations sociales de la santé et la santé en mutation: un regard rétrospectif et prospectif sur la fécondité d'un concept. In Buschini, F., & Kalampalikis, N. (Eds.), *Penser la vie, le social, la nature. Mélanges en l'honneur de S. Moscovici* (pp. 189-200). Paris: Editions de la MSH.
- Joffe, H. (1999). *Risk and 'the other'*. Cambridge: Cambridge University Press.
- Joffe, H., & Staerkle, C. (2007). The centrality of the self-control ethos in western aspersions regarding outgroups: A social representational approach to stereotype content. *Culture & Psychology*, 13(4), 395–418. doi:10.1177/1354067X07082750
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review*, 5, 602–619. doi: 10.1177/0193841X8100500502
- Le Breton, D. (2007). *La sociologie du corps*. Paris : Presses Universitaires de France.
- Leeuwen, M. L. Van, & Macrae, C. N. (2004). Is beautiful always good? Implicit benefits of facial attractiveness. *Social Cognition*, 22(6), 637–649. doi: 10.1521/soco.22.6.637.54819
- Macrae, C. N., & Quadflieg, S. (2010). Perceiving people. In Fiske, S., Gilbert, D. T., & Lindzey, G. (Eds.), *The Handbook of Social Psychology* (pp. 428-63). New York: McGraw-Hill.
- Maisonneuve, J., & Bruchon-Schweitzer, M. (1999). *Le corps et la beauté*. Paris: Presses Universitaires de France.
- Massé, R. (2001). La santé publique comme projet politique et projet individuel. In Hours, B. (Eds.), *Systèmes et politiques de santé. De la santé publique à l'anthropologie* (pp. 41-66). Paris: Karthala.
- Mollen, S., Ruiter, R. A. C., & Kok, G. (2010). Current issues and new directions in psychology and health : What are the oughts? The adverse effects of using social norms in health communication. *Psychology and Health*, 25(3), 265–270. doi : 10.1080/08870440903262812
- Murray, M., & Poland, B. (2006). Health psychology and social action. *Journal of Health Psychology*, 11(3), 379–384. doi: 10.1177/1359105306063308
- Murray, M., Pullman, D., & Rodgers, T. H. (2003). Social representations of health and illness among 'baby-boomers' in Eastern Canada. *Journal of Health Psychology*, 8(5), 485–499. doi: 10.1177/13591053030085002

- Pansu, P., & Dubois, M. (2002). The effects of face attractiveness on pre-selective recruitment. *Swiss Journal of Psychology, 61*(1), 15–20. doi: 10.1024//1421-0185.61.1.15
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. doi:10.3758/BRM.40.3.879
- Rumsey, N., & Harcourt, D. (2005). *The psychology of appearance*. Maidenhead: Open University Press.
- Russell, A. M. T., & Fiske, S. T. (2008). It's all relative: Competition and status drive interpersonal perception. *European Journal of Social Psychology, 38*, 1193–201
- Singh, D., & Young, R. K. (1995). Body weight, waist-to-hip ratio, breasts, and hips: Role in judgments of female attractiveness and desirability for relationships. *Ethology and Sociobiology, 16*, 483–507. doi: doi:10.1016/0162-3095(95)00074-7
- Stoetzel, J. (1960). La maladie, le malade et le médecin : Esquisse d'une analyse psychosociale. *Population, 15*(4), 613-624.
- Testé, B. (2003). Conformity and deviance. In N. Dubois (Ed.), *A sociocognitive approach to social norms* (pp. 17–37). London: Routledge.
- Weeden, J., & Sabini, J. (2005). Physical Attractiveness and Health in Western Societies: A Review. *Psychological Bulletin, 131*(5), 635–653. doi:10.1037/0033-2909.131.5.635
- Yang, H., & Lee, L. (2014). Instantaneously hotter: The dynamic revision of beauty assessment standards. *Advances in Consumer Research, 42*, 744–745. Retrieved from: [http://www.acrwebsite.org/volumes/v42/acr\\_v42\\_17500.pdf](http://www.acrwebsite.org/volumes/v42/acr_v42_17500.pdf)
- Zebrowitz, L. A., & Montepare, J. M. (2008). Social psychological face perception: Why appearance matters. *Soc Personal Psychol Compass, 2*(3), 1–16. doi:10.1111/j.1751-9004.2008.00109.x.Social
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology, 77*(6), 1271-1288. doi: 10.1037/0022-3514.77.6.1271
- Zimbardo, P. G., Keough, K. A., & Boyd, J. N. (1997). Present time perspective as a predictor of risky driving. *Personality and Individual Differences, 23*, 1007–1023. doi: 10.1016/S0191-8869(97)00113-X