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“Behave like a responsible adult” – Relation between social identity and psychosocial skills at stake in self-management of a chronic disease

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ABSTRACT – We show that the development of psychosocial skills promoting self-management of a chronic disease is associated with the acquisition of a social identity valued in the ideological context of reference. To do this, we focus on a skill that is important for people suffering from a chronic disease to acquire: assuming responsibility for self-managing one’s own pathology. Because acting responsibly is also a skill socially attributed to the identity of adults in Western liberal societies, we studied the chronically ill’s sense of belonging to the adult social group. In Study 1 ($N = 102$ diabetics), we suggested that behaving like a “responsible adult” in the self-management of a chronic disease is socially valued. In Study 2 ($N = 261$ diabetics), we suggested that identification with this group is associated with a feeling of responsibility promoting improved self-management behaviours. The results obtained from the two studies are consistent with our hypotheses. They allow us to conceptualize psychosocial skills through the identity, ideological and normative issues that underpin their development.

Keywords: psychosocial skills / chronic disease / self-management / social identity / responsibility

1. INTRODUCTION

Initially studied in social psychology, psychosocial skills are central areas of the prevention policies of the World Health Organization (WHO, 1997, 2003). These skills are applied in the field of chronic diseases to support the development of patients' capacity to act. However, despite the growing interest in this issue, the notion of psychosocial skills remains poorly conceptualized. These skills are studied through approaches that do not sufficiently take into account the psychosocial processes involved in their development. However, it has been established that psychosocial skills are shaped by the cultural context of reference (WHO, 1997) and that they are actualized within the dynamics of social relations (Argyle, 2011). When taking into account the socio-historical approach to linguistic skills (Bourdieu, 1991) for conceptualizing psychosocial skills, it could be suggested that: (1) the choice of psychosocial skills to be reinforced in patients seems to be determined by the normative expectations arising from the ideological context of reference; (2) the expectation of the development of these skills could be associated with the acquisition of a valued social identity in this same context, which in turn imposes a duty to draw on these skills. For instance, assuming one's own responsibilities is an important psychosocial skill in the adoption of health behaviours (WHO, 2003), but also a skill socially attributed to adult identity in Western liberal societies (Arnett, 2006). This research examines identity and normative processes involved in the development of psychosocial skills promoting self-management of a chronic disease.

1.1. Psychosocial skills and chronic disease

Psychosocial skills have been defined by Argyle (2011) as patterns of social behaviour that lead individuals to become socially competent, that is, capable of achieving the goals pursued by producing the desired effects on oneself and on others. According to the cybernetic

model associated with this definition, an individual who draws on a psychosocial skill begins by aiming at certain objectives, proceeds to achieve them by behavioural reactions, perceives their effects through feedback and corrects his way of proceeding through new behavioural reactions. Argyle considers psychosocial skills as a dynamic and relational process: motivated by the attainment of an objective, the individual continually rectifies his behaviour in response to that of others.

Applied in the field of health, the issue of psychosocial skills is an object of growing interest to researchers and practitioners. These skills play an important role in the promotion of well-being, especially when health problems are related to the ability of individuals to adopt behaviours that respond effectively to the stress and pressures of everyday life (WHO, 1997). Because they also enable patients to develop autonomy and the ability to deal with the challenges of chronic disease (WHO, 2003), psychosocial skills are a particular focus of therapeutic patient education (for a systematic review, see Fonte, Apostolidis, & Lagouanelle-Simeoni, 2014). This interventional field aims to help patients reinforce the psychosocial and self-care skills they need to manage their lives with a chronic disease as well as possible, in order to improve their quality of life and their survival (WHO, 1998).

1.2. Taking Responsibility for one's own health: An important psychosocial skill

Assuming responsibility for managing one's own chronic disease is considered as an important psychosocial skill to be strengthened in the context of therapeutic patient education (WHO, 1998, 2003). This skill implies beliefs pertaining to who has responsibility and who assumes responsibility for taking on obligations to behave in such a way as to attain desired outcomes through self-management (Audulv, Asplund, & Norbergh, 2010). The feeling of individual responsibility is considered to be important for health promotion, and so should be

evaluated by educational interventions that aim to reduce risk behaviours and to promote health behaviours (see Kals, 2001). The same perspective is supported by several studies in the field of chronic disease. Indeed, the fact of assuming responsibility is considered as a key skill to help patients play an active part in managing their disease (Auduly et al., 2010; Coventry, Fisher, Kenning, Bee, & Bower, 2014).

The capacity to feel responsible for one's own situation has also aroused a great interest in the field of psychology. For instance, the recognition of one's own responsibility is the initial step on which all the work of existential psychotherapy must be based in order to help the patient to make the changes they desire (Yalom, 1980). This capacity of recognition would allow the patients to represent themselves as active players in their own existence, life projects, choices and actions. However, the development of an exaggerated feeling of responsibility can be a source of suffering for some patients (see the notion of inflated responsibility in clinical psychology, Rhéaume, Ladouceur, Freeston, & Letarte, 1995; Salkovskis, Shafron, Rachman, & Freeston, 1999). The case study of a diabetic adolescent that we carried out in the context of therapeutic education helps to illustrate this phenomenon (Fonte, Lagouanelle-Simeoni, & Apostolidis, 2017). Specifically, this patient saw responsibility for self-management of diabetes as a socio-affective loss (feeling of abandonment, decreased parental support) and as a danger to oneself (assignment of worrying responsibilities, fear of failure and consequences for one's own health). Accountability can thus not only promote the empowerment of patients, but also act as a barrier to their well-being when they do not find the resources they need in their psychosocial environment to cope with the disease and its associated treatments.

The literature on patient responsibility is representative of how psychosocial skills are usually studied in the field of chronic diseases as well as in other fields of therapeutic care. We can point out how little attention is paid by this literature to the psychosocial processes involved in the acquisition of psychosocial skills (Fonte, Lagouanelle-Simeoni, & Apostolidis, 2017).

However, psychosocial skills only make sense through relationships with others, in specific situations that engender them and on which they have a retroactive effect (Argyle, 2011). This perspective is also consistent with the World Health Organization's recommendation: conceptualizing psychosocial skills by taking into account the cultural context in which they are promoted and evaluated (WHO, 1997). In this respect, our research contributes to the conceptualization of psychosocial skills through the specific functions that they can have within the socio-symbolic relationships that organize the context of reference.

1.3. Towards a conceptualization of skills through the Bourdieusian perspective

The socio-historical approach to linguistic skill developed by Bourdieu (1991) offers a fertile conceptual way of questioning the social and identity dynamics involved in the acquisition of psychosocial skills. According to Bourdieu, a skill is considered as such because it produces a social performance which gives its author a certain value within the space of the social field in question. More precisely, the social value associated with this performance is thought to be determined by: (1) a context that posits as a legitimate norm the acquisition of skills that are consistent with the economic, political or ideological project that constitutes it; (2) a motivational principle of "social distinction" (Bourdieu, 1984) that reflects the position occupied in the hierarchy of groups. This principle of distinction can be concretely translated into the acquisition of a social identity which in turn imposes the duty to draw on these skills in order to enjoy a certain number of symbolic benefits (e.g., being subject to a positive social evaluation or being more persuasive in producing the desired effects on others).

In our case, the choice of health professionals to focus on strengthening some psychosocial skills rather than others would be greatly determined by the normative expectations of the ideological context in which they intervene. Indeed, therapeutic patient

education is a socialization space in which health professionals teach patients to think of their existence in terms of self-management under the impact of a health-based rationale (e.g., anticipating the consequences of one's actions on one's own health, planning one's daily life in accordance with disease and associated treatments). This practice is part of the ideological project of liberal societies that is characterized by the valuing and normalization of skills such as self-control, autonomy, and individual responsibility (Foucault, 2008; Joffe & Staerklé, 2007; Rose, 2000).

If the acquisition of a valued social identity were an essential motivation for the mobilization of skills (Bourdieu, 1991), psychosocial skills would therefore be associated with an identity consistent with the normative expectations of liberalism (i.e., to assume individual responsibility for one's own existence). This research therefore focuses on the relationship between the acquisition of a social identity which is valued in this ideological context and the mobilization of a psychosocial skill that consists in assuming responsibility for the management of one's own pathology.

1.4. Being adult: At the interface of psychosocial skills and social identity

We are of the opinion that adult identity is one of the identities most likely to be attributed to patients who fulfill the "duties" prescribed by the social expectations of Western societies. The etymology of the word "adult" suggests that from the outset this status incorporates the question of the recognition of the socially accomplished individual. This word derives from the Latin root *adultus* and means someone who has grown up (Gordh & Headrick, 2000). By extension, it refers to the idea of moral or social greatness (Vallet, 2007). In other words, the acquisition of adult status would depend on normative criteria defining the orientation of the social future of individuals. In our context, Arnett's work (1997, 2006) has shown that the

representations associated with adult identity refer to skills promoted by liberal ideology: to be financially autonomous, to make decisions independently of others and to assume the consequences of one's own actions. Individual responsibility would therefore constitute an important identity issue in this neoliberal context, since it would be the subject of a social evaluation in relation to norms defining the acceptability criteria of what an adult person should be (for an overview of intercultural variations of the social construction of the adult identity, see Raveaud, 2010).

In the field of health, several studies consider the sense of being an adult as a psychological resource of physical and mental health. For instance, it has been shown that a strong sense of being an adult is associated with lower depressive symptoms and risk behaviours, such as drug and alcohol use (Nelson & Barry, 2005). It has also been shown that the sense of being an adult is positively correlated with the adoption of effective coping strategies for self-management of a chronic disease (Luyckx, Moons, & Weets, 2011). The adult social group is therefore likely to constitute a "reference group" (Hyman, 1942) for patients and health professionals who are in an ideological context that is characterized by the normalization of individual responsibility. The literature has shown that identity processes help to predict health behaviours independently of the individual's attitudes or perceived self-efficacy (e.g., Falomir & Invernizzi, 1999; Falomir et al., 2009; Shadel, Mermelstein, & Borrelli, 1996). These identity and normative processes can therefore bring new light to conceptualizing the development of patient self-management skills such as the feeling of individual responsibility.

1.5. Identity issues and responsibility in diabetes self-management

Adults living with Type 1 diabetes are a relevant population for exploring the relationship between social identity and a psychosocial skill such as the feeling of responsibility in the self-management of pathology. This pathological field is both a pioneer in the development of therapeutic patient education and incorporates health issues shared with other types of chronic diseases. Specifically, Type 1 diabetes is a condition that is commonly diagnosed during childhood or adolescence (Maahs, West, Lawrence, & Mayer-Davis, 2010) and lasts throughout life. Diabetic adolescents socialize in areas which contribute to the construction of their social identity, including through the close relationship they maintain with protagonists in the health system. In therapeutic education programmes, health professionals need to support these future adults in learning to be autonomous and responsible in the day-to-day management of diabetes (Anderson & Wolpert, 2004; Cameron, Amin, de Beaufort, Codner, & Acerini, 2014). Diabetic adolescents must therefore achieve glycaemic objectives set by health professionals, by learning to manage insulin injection, diet, and physical activity (Lange et al., 2014; Swift, 2009).

Recently, a qualitative study on the representations and experiences that adolescents with diabetes associate with well-being allowed us to identify an identity tension in self-management (Fonte et al., 2017). More specifically, the results showed that a number of adolescents rejected the responsibilities of the self-management of diabetes because they perceived this therapeutic objective as a barrier to their psychological and social well-being. We then proposed an identity explanation for this phenomenon: these responsibilities are likely to be rejected because they would prove incompatible with the hedonistic attitude of recklessness and immediate pleasure thought to characterize the axiological system of adolescence and the mode of socialization between peers (See Hamzah et al., 2014, Vrangalova & Savin-Williams, 2011). We

hypothesized that the normative constraint imposed by adults on the self-management of diabetes was likely to mark a symbolic break with the world of adolescence and to involve young diabetics as future adults. This research should provide new insight into identity and normative issues that may be actualised in the self-management of diabetes.

1.6. Hypotheses and research goals

We think that the development of psychosocial skills promoting self-management of diabetes would be associated with the acquisition of a social identity valued in the ideological context of reference. In order to verify this hypothesis, we focused on an important skill for people suffering from diabetes to acquire: assuming responsibility for the self-management of one's own pathology (WHO, 2003). Because acting responsibly is also a skill socially attributed to the identity of being an adult in Western liberal societies (Arnett, 2006), we studied the sense of belonging with the adult social group in people living with Type 1 diabetes. Our research combined two studies aimed at testing distinct hypotheses. Firstly, to test whether, in a context marked by neoliberal ideology, the presenting of the self as a responsible adult in diabetes self-management was a socially valued attitude (Study 1). Secondly, to test whether identification with the adult group is related to the feeling of responsibility and diabetes self-management behaviours (Study 2).

2. STUDY 1: SOCIAL VALORISATION OF THE “RESPONSIBLE ADULT” AMONGST PEOPLE WITH DIABETES

This experimental study was designed to explore the social valorisation associated with the presentation of oneself as a responsible adult in diabetes self-management. The self-presentation paradigm (Jellison & Green, 1981; see also Guignard, Apostolidis, & Demarque, 2014; Guignard, Bertoldo, Goula, & Apostolidis, 2015) allowed us to check whether the presentation of oneself as a responsible adult is used by diabetics as a self-valorisation strategy in a medical situation. Specifically, this paradigm allowed us to analyse whether they are clear-sighted about the normative nature of skills on which they are likely to work in their relationship with health professionals. Our hypothesis was that, in a context marked by neoliberal ideology, diabetics tend to present themselves as adults with a high feeling of responsibility in diabetes self-management if they seek to gain approval from their physician. However, if diabetics aim to gain disapproval from their physician, they would be expected to present themselves with a low feeling of responsibility in self-management.

2.1. Participants

In all, 102 Type 1 diabetics took part in Study 1. The sample was 81 percent women, with an age between 18 and 77 years ($M = 40.56$, $SD = 14.15$), who had reported suffering from diabetes for several years ($M = 21.47$, $SD = 14.57$). They were located in the UK (50%), USA (43%), Canada (4%), Australia (2%) and New Zealand (1%).

2.2. Procedure

Due to the difficulty of accessing a population of Type 1 diabetics and establishing a satisfactory sample size, we conducted an online study by recruiting our participants through a social network. This is a relevant method of recruitment for establishing a consistent sample size from a rare or highly specific population (Reips, 2002). Specifically, we posted a recruitment advert in support groups for Type 1 diabetics that we found on Facebook. The recruitment advert invited them to take part in a research on the social factors associated with the adoption of diabetes self-management behaviours. Four inclusion criteria had to be met for participation: (a) being diagnosed with Type 1 diabetes, (b) being over the age of majority according to the laws of the participant's country, (c) being fluent in English, and (d) giving full informed consent after having read the information leaflet. Volunteers could not access the online questionnaire before declaring that they fulfilled these conditions. Recruitment was closed when there were no more participants for three consecutive days. Then, participants from non English-speaking countries were excluded ($N = 6$) in order to keep those people living in a context as marked as possible by the cultural values of individualism (Beauvois, 2005; Hofstede, Hofstede, & Minkov, 2010).

Each participant completed a questionnaire¹ about their feeling of responsibility in self-management three consecutive times, but with different instructions enabling them to operationalize the paradigm of self-presentation (Table 1). Participants were firstly asked to complete the questionnaire spontaneously (standard instruction). Then, they were asked to imagine a physician who would read their responses in the context of a medical examination and to answer the same questionnaire as adults in order to gain their approval (normative

¹. Le questionnaire complet est disponible dans l'Annexe C.

instruction) or disapproval (counter-normative instruction). The order of the last two instructions was counterbalanced by using a hyperlink randomly reversing this order.

Table 1. The three instructions operationalizing the paradigm of self-presentation (Study 1)

Standard instruction	Normative instruction	Counter-normative instruction
You'll find below a list of activities related to diabetes self-management. We kindly ask you to read them carefully and then to respond by indicating how much you feel personally responsible for each of them.	Now imagine that you're having a medical examination and the physician knows your responses. We ask you again to read each activity. Reply to the questionnaire as an adult in order to deliberately obtain the physician's approval.	Finally, let's imagine that you're still in the same situation (medical examination; a physician knows your answers). We ask you to read for the last time each activity. Reply to the questionnaire as an adult in order to deliberately obtain the physician's disapproval.

Note. Here the participants reply to the normative instruction before the counter-normative instruction.

2.3. Measure

Feeling of responsibility in self-management. The feeling of responsibility in self-management was measured with a 10-item questionnaire. Because there is no scale to perform this specific measure, we constructed our own questionnaire based on the items of the Self-Efficacy for Diabetes Management Scale (Iannotti et al., 2006). Specifically, the instructions and the modalities of responses concerning sense of capacity were reformulated to measure the level of personal responsibility felt in self-management activities. In other words, our questionnaire allowed us to measure the feeling of responsibility and not the sense of self-efficacy. Items of this scale referred to everyday behaviours related to diabetes (e.g., “Choosing healthy foods when you go out to eat”, “Adjusting insulin or food accurately based on how much exercise you get”). Responses were given on a 1 (*I don't feel responsible at all*) to 10 (*I feel totally responsible*) scale, and overall scores could range from 1 to 10, with higher scores representing a stronger feeling of responsibility.

2.4. Results

Internal consistency of the feeling of responsibility score was excellent for standard ($\alpha = .96$), normative ($\alpha = .98$) and counter-normative ($\alpha = .99$) instructions. Two ANOVAs were performed in order to evaluate the effect of the order in which the instructions had been given. For the score of normative instruction, the difference between participants who started with the normative instruction ($M = 7.19, SD = 2.15$) and those who started with the counter-normative instruction ($M = 7.73, SD = 2.47$) was non-significant ($F(1, 100) = 1.36, p = .246, \eta^2 = .01$). For the score of counter-normative instruction, the difference between participants who started with the counter-normative instruction ($M = 3.95, SD = 3.09$) and those who started with the normative instruction ($M = 2.75, SD = 2.78$) was significant ($F(1, 100) = 4.19, p < .05, \eta^2 = .04$). Despite the significant effect of the order on the feeling of responsibility score (normative and counter-normative instructions), we decided to continue the analyses without taking into account the order effect of instructions.

Then, the feeling of responsibility score was submitted to an ANOVA with one within-subject independent variable: self-presentation instruction with three conditions (standard, normative and counter-normative). The analysis revealed an effect of the self-presentation instruction on the responsibility score ($F(2, 100) = 120.80, p < .001, \eta^2 = .55$). Bonferroni pairwise comparisons revealed that the mean score for normative instruction ($M = 7.48, SD = 2.33$) was higher than the one obtained for standard instruction ($M = 6.97, SD = 2.29, p < .001$), which, in turn, was higher than the one for counter-normative instruction ($M = 3.40, SD = 2.99, p < .001$). Hence, when the participants sought to the gain approval of a health professional, they presented themselves as adults who felt very responsible about self-management. In

contrast, they presented themselves as less responsible adults in order to gain disapproval (Figure 1).

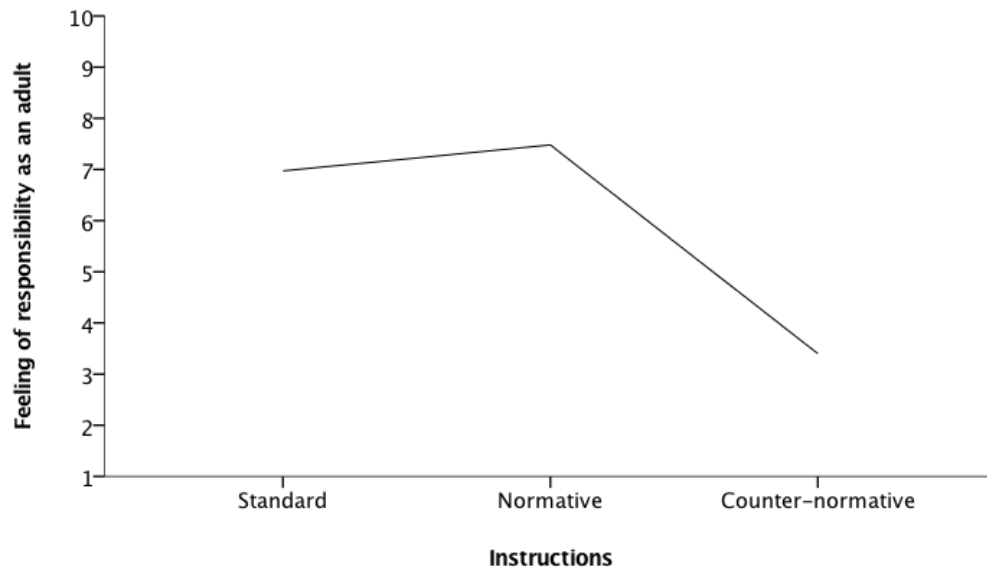


Figure 1. Mean scores of the feeling of responsibility in the three instructions (Study 1)

2.5. Discussion

The results of Study 1 strongly support the hypothesis of social valorisation of self-presentation as a responsible adult towards diabetes self-management in a medical situation. Indeed, the instructions of the self-presentation paradigm highly influenced the feeling of responsibility scores. When the instruction asked for a positive self-presentation, the participants reported a higher feeling of responsibility than in the standard instruction. The significant difference of the answers between normative and counter-normative instruction suggest that a high social value is associated with the feeling of responsibility in diabetes self-management. These results suggest that diabetics living in a neoliberal context are quite familiar with the normative issues of their answers when one of their psychosocial skills is evaluated by

a health professional. Depending on the context of the evaluation of a psychosocial skill such as the feeling of responsibility, the answers of the patients could be oriented by normative regulations. These findings strongly reinforce the idea that the adult group acts as a reference group for patients and health professionals who are characterized by the valorisation of individual responsibility in an ideological context. Consequently, the social valorisation of the “responsible adult” invites us to look closely at the relationship between this identity aspect and diabetes self-management. This investigation was the subject of Study 2.

3. STUDY 2: RELATIONSHIP BETWEEN ADULT IDENTITY AND DIABETES SELF-MANAGEMENT

This cross-sectional study was designed to explore the relationship between the adult group and diabetes self-management, using social identity and self-categorization theories (Tajfel & Turner, 1986; Turner & Reynolds, 2012). According to these theories, the sense of being an adult also implies belonging to a social group that generates categorical processes and behaviours: the stronger a person’s identification with a social group, the stronger is one’s motivation to behave in consistency with norms and values that are socially attributed to this group. Our hypothesis was therefore that the diabetic’s identification with the adult group is related to diabetes self-management behaviours, and that this relationship is mediated by their feeling of responsibility in diabetes self-management. However, to the extent that the sense of being an adult increases with the biological age of adults (Arnett, 2006), there is reason to believe that the feeling of being responsible in diabetes self-management is determined by the age of diabetics rather than their sense of belonging to the adult group. In order to ensure that it is the adult social group, and not the biological age, which determines the feeling of responsibility, we put forward a competing hypothesis that biological age predicts the feeling

of responsibility. We expected that the feeling of responsibility would be predicted more by the sense of belonging to the adult group than by biological age.

3.1. Participants

In all, 261 Type 1 diabetics took part in Study 2. The sample was 86 percent women, with an age between 18 and 69 years ($M = 36.86$, $SD = 12.18$), who had reported suffering from diabetes for several years ($M = 19.64$, $SD = 13.42$). They were located in the USA (66%), UK (23%), Canada (7%), Australia (2%) and New Zealand (2%).

3.2. Procedure

Participants were recruited on Facebook by posting a recruitment advert in the same support groups of diabetics that we found for Study 1. The advert invited them to take part in a research on the social factors associated with the adoption of diabetes self-management behaviours. Four inclusion criteria had to be met for participation: (a) being diagnosed with Type 1 diabetes, (b) being over the age of majority according to the laws of the participant's country, (c) being fluent in English, and (d) giving full informed consent after having read the information leaflet. Volunteers could not access the questionnaire² before declaring that they fulfilled these conditions. Recruitment was closed when there were no more participants for three consecutive days. Our sample size was satisfactory in regards to the analyses we carried out because at least 200 participants are required for a structural equation modelling (Kline, 2005), particularly when the model has no more than 10 parameters (Jackson, 2003). After recruitment, participants from non English-speaking countries were excluded ($N = 11$) in order

². Le questionnaire complet est disponible dans l'Annexe D.

to keep a population marked by the same cultural context than in Study 1 (i.e., the neoliberal individualism).

3.3. Measures

Identification with the adult social group. Identification with the adult social group was measured with a scale adapted from Falomir, Toscani and Despointes' (2009) 5-item measure of group identification ("I identify with the values of [adults]", "I am proud to be an [adult]", "Being [adult] occupies an important place in the definition of who I am", "I feel I belong to the [adult] group", "Feeling [adult] is important to me"). A sixth item adapted from Reysen, Katzarska-Miller, Nesbit and Pierce's (2013) single-item measure of group identification was added ("I strongly identify with the [adult] group"). Responses were given on a 1 (*Not at all*) to 10 (*Absolutely*) scale and overall scores could range from 1 to 10, with higher scores representing stronger identification.

Feeling of responsibility in self-management. The feeling of responsibility in self-management was measured with the same 10-item questionnaire that we used in Study 1. Items of this questionnaire referred to everyday behaviours related to diabetes and responses were given on a 1 (*I don't feel responsible at all*) to 10 (*I feel totally responsible*) scale. Overall scores could range from 1 to 10, with higher scores representing a stronger feeling of responsibility diabetes in self-management.

Self-management behaviours. Self-management behaviours were measured with the Diabetes Self-Management Questionnaire (Schmitt et al., 2013). This 16-item questionnaire refers to the adoption of health-related behaviours over the past 8 weeks, such as blood glucose measurement and medication intake (e.g., "I check my blood sugar levels with care and attention"), dietary habits facilitating diabetes control (e.g., "The food I choose to eat makes it

easy to achieve optimal blood sugar levels”), avoidance of physical exercise (e.g., “I do regular physical activity to achieve optimal blood sugar levels”) and avoidance of medical appointments (e.g., “I keep all doctors’ appointments recommended for my diabetes treatment”). Responses were given on a 0 (*Does not apply to me*) to 3 (*Applies very much to me*) scale, and overall scores could range from 1 to 10, with higher scores representing greater adoption of self-management behaviours.

3.4. Results

Descriptive statistics (means, standard deviation and internal consistency) and correlations for the relevant measures are displayed in Table 2. Correlations were performed to examine whether group identification, psychosocial skills and self-management behaviours were correlated. These analyses revealed that all correlations were significant (all p 's < .01).

Table 2. Descriptive statistics and correlations between variables (Study 2)

Variable	Descriptive statistics			Pearson correlations		
	<i>M</i>	<i>SD</i>	α	(1)	(2)	(3)
Group identification (1)	7.15	2.36	.95	–		
Age of participants (2)	36.86	12.18	–	.32**	–	
Feeling of responsibility (3)	6.62	2.53	.96	.67**	.22**	–
Self-management behaviours(4)	7.17	1.50	.83	.30**	.22**	.49**

Note. ** $p < .01$

Then, a structural equation model³ was performed in order to test our theoretical model in which group identification and age of participants were related to the feeling of responsibility and, simultaneously, this feeling to self-management behaviours (Figure 2). This analysis revealed that all standardized path coefficients were significant (all p 's < .001), except for the relationship between participants' age and the feeling of responsibility ($p = .921$) and for the relationship between group identity and diabetes self-management behaviours ($p = .530$). In order to check for the significance of the indirect mediated effect of these two paths, bootstrap tests were performed (mean of 5000 bootstrap samples with bias-corrected 95% confidence intervals). These analyses revealed a significant indirect effect for the relationship between participants' age and the feeling of responsibility ($p < .001$, 95% CI = 0.03; 0.05), and also for the relationship between group identity and diabetes self-management behaviours ($p < .001$, 95% CI = 0.17; 0.29). This suggests that group identification is a significant full mediator in the relationship between participants' age and the feeling of responsibility. It also suggests that the feeling of responsibility is a significant full mediator in the relationship between group identification and diabetes self-management behaviours. Note that the goodness-of-fit tests yielded a significant chi square ($\chi^2(1) = 5.93$, $p < .05$), which means that the model did not fit the observed data. The model's baseline fit was inadequate (RMSEA = 0.13, CFI = 0.98).

³. Standard fit indices were used (see Kline, 2005). The chi-squared index tested the null hypothesis of perfect fit to our data. It had to be as small as possible and non-significant ($p > .05$). The root mean square error of approximation (RMSEA) measured the distance between the model-implied covariance structure and the covariance structure observed in our data. A threshold of less than 0.05 was considered as acceptable. The comparative fit index (CFI) compared the studied model to a null model without paths. A threshold of more than 0.95 was considered as acceptable.

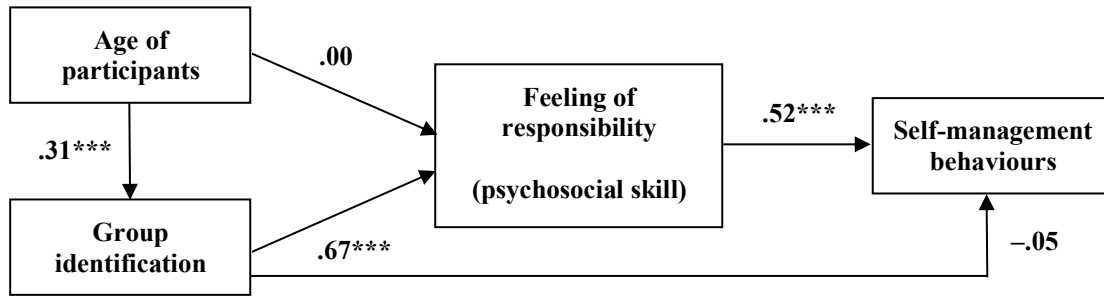


Figure 2. Initial structural equation model with standardized path coefficients (Study 2).

Note. *** $p < .001$.

We therefore rectified our theoretical model to decrease the chi-squared index: the non-significant direct effects were withdrawn and, on the basis of the modification indices, a relationship between participants' age and diabetes self-management behaviours were added (Figure 3). This new model revealed that all standardized path coefficients were significant (all p 's $< .05$). Goodness-of-fit tests yielded a non-significant chi square ($\chi^2(2) = 1.390, p = .449$), which meant that the new model fitted the observed data. The model's baseline fit was adequate (RMSEA = 0.00, CFI = 1.00). Thus, these results are relatively consistent with our hypotheses.

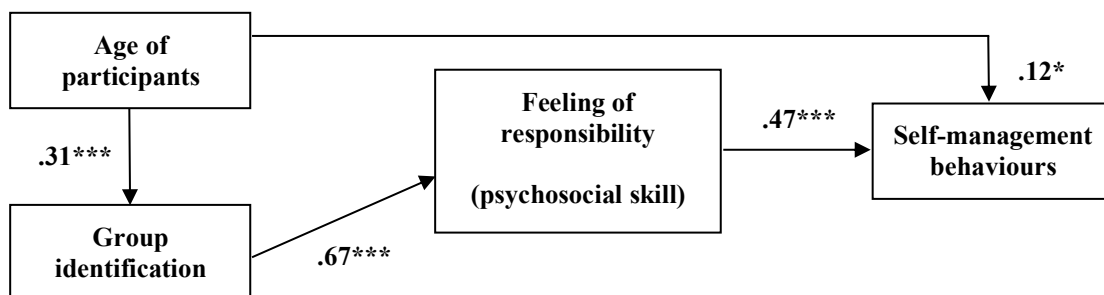


Figure 3. Final structural equation model with standardized path coefficients (Study 2)

Note. * $p < .05$; *** $p < .001$.

3.5. Discussion

Our model showed that identification with the adult group was associated with a feeling of responsibility towards one's own disease, which is consistent with the theory of self-categorization (Turner & Reynold., 2012). Because individual responsibility is a skill socially attributed to the identity of the adult in Western neoliberal societies (Arnett, 2006), diabetics who strongly identify with the adult group draw on this skill more in the management of their pathology. A competing hypothesis was proposed here to test whether the feeling of responsibility was more predicted by the age of the participants than by their sense of belonging to the adult group. However, the age of the participants was not associated with the feeling of responsibility, which means that becoming an adult would be determined more by socially constructed categories than by biological age (Bourdieu, 1993). In contrast, the age of participants was associated with group identification and self-management behaviours. The model finally showed that the feeling of responsibility was associated with diabetes self-management behaviours, statistically confirming this relationship suggested by some qualitative research (see Audulv et al., 2010; see also Coventry et al., 2014).

4. GENERAL DISCUSSION

This research makes an original contribution to the understanding of the identity processes involved in the development of psychosocial skills promoting self-management of a chronic disease. Because acting responsibly is a skill that is both important for patients with a chronic disease to acquire and is socially attributed to the identity of adults in a neoliberal ideological context, we studied the chronically ill's sense of belonging to the adult social group. On the basis of our results, the adult group is likely to constitute a reference group for patients

forced to assume responsibility for their chronic disease self-management. Indeed, the participants presented themselves as adults with a high feeling of responsibility in diabetes self-management when they sought to gain approval from their physician, which suggests that behaving like a “responsible adult” is socially valued in a medical situation (Study 1). Then, a second investigation explored the relationship between this identity aspect and diabetes self-management. It showed that participant’s identification with the adult group was correlated with a feeling of responsibility promoting diabetes self-management behaviours (Study 2). The findings of the two constructed studies reinforce our hypothesis based on the Bourdieusian perspective, which is that the development of psychosocial skills is associated with the acquisition of a social identity valued in the ideological context of reference.

A positional and ideological level analysis (Doise, 1986, 2011) could be carried out here to bring depth to our understanding of the phenomenon. The positional level refers to a social status that is both determined by a hierarchized social structure and is determining in the relations that individuals or groups establish in certain situations; the ideological level refers to the fact that each society produces systems of representations that involve evaluation processes and norms whose function is to justify an established social order. Applied to our work, the study of social identity restored to a more global dimension of society would allow us to better understand the socio-symbolic relationships that underlie the representation of the adult as an individual responsible for his own health. This reflection can be illuminated by Bourdieu’s analysis of the issues of struggle and power between generations: “the ideological representation of the division between young and old grants certain things to the youngest, which means that in return they have to leave many things to their elders. (...) the logical division between young and old is also a question of power, of the *division* (in the sense of sharing-out) of powers. Classification by age (but also by sex and, of course, class...) always means imposing limits and producing an *order* to which each person must keep, keeping

himself in his place” (Bourdieu, 1993, p. 94). This social order must here be understood as a moral order in which the adult has the duty to avoid behaviours considered as irresponsible and immature (Arnett, 2006, Bourdieu, 1993). In this context, psychosocial skills are likely to constitute a duty to which patients have to conform in order not to be cast out from the adult world. Specifically, those who do not behave like “responsible adults” with their own health would still risk losing a number of symbolic benefits associated with this social identity (e.g., loss of recognition of actor and decision-maker status, the strengthening of an asymmetric relationship in a therapeutic situation promoting infantilization and medical paternalism.).

These considerations reinforce Argyle’s (2011) conceptualization regarding the fundamentally dynamic and relational aspect of psychosocial skills. However, the relationship between the individual and the social group is not alone in the process of acquiring psychosocial skills. It is also necessary to take into account the ideological context of reference that shapes these socio-symbolic relationships. In our case, the literature shows that adult identity is associated with different normative expectations depending on the ideological contexts. For instance, it has been shown that in a context that fosters collectivist values of integration and interdependence, individuals attribute a form of responsibility to adults oriented towards the consequences of their own actions for others and the community (Nelson, Badger, & Wu, 2004). This result contrasts with the individual responsibility attributed to adults in liberal societies (Arnett, 2006), which is more consistent with the promotion of psychosocial skills promoting independence and autonomy in a context of chronic disease. We can therefore suppose that the feeling of responsibility in diabetes self-management would not be associated with an adult identity in collectivist societies. In other words, the development of the same psychosocial skill can be associated with the acquisition of different social identities according to the cultural values which govern the lives of people living with a chronic disease.

Our research has some limitations. The first limitation concerns the method of online recruitment, as the effect of self-selection of participants may affect the representativeness of the sample and the generalization of the data. Self-selection in online studies would depend on the socio-demographic characteristics of the participants and their attitude and motivation towards the proposed study object (Goeritz & Schumacher, 2000; Reips, 2002). In our case, the sample was mainly composed of diabetic women using social networks and seeking peer support to cope with the difficulties of the disease. However, the method of recruitment we used also has advantages for the generalization of results because it offers a greater likelihood of obtaining a socio-culturally diverse sample (Kent & Lee, 1999; Sheehan & McMillan, 1999). It should finally be noted that the validity of results is no less satisfactory for online surveys than for conventional surveys. For instance, some research has shown a congruence between these two types of surveys (Best, Krueger, Hubbard, & Smith, 2001, McGray, Tew, & Williams, 2000, Miller et al., 2002). On the other hand, other studies suggest that the anonymity guaranteed by online surveys leads to more sincere answers and less social desirability than do classical surveys (Couper, 2000; Sheehan, 2001).

An other limitation is related to the cross-sectional and correlational nature of the data, which does not establish any causality. However, the theory of self-categorization (Turner & Reynolds, 2012) allows us to suppose the direction of causality between group identification and self-management behaviours. According to this theory, identification with a social group is underpinned by categorical processes that determine consistency with other members of that group (i.e., being responsible like any adult). It could then be considered that the expectations that health professionals formulate with regard to diabetics can have an effect on their desire to belong to the adult group and to maintain a coherent attitude with this social belonging. For instance, it has been shown that, probably because of these expectations of accountability expressed by professionals towards patients, young people with diabetes consider themselves

more like adults than non-diabetics of the same age (Luyckx et al., 2011). One way of testing the supposed causal effect of group identification on the intention to follow medical recommendations more directly would be to experimentally manipulate the patient's level of identification with the adult group. From this perspective, the manipulation of this identification could be carried out through a method of priming the state of mind inherent in the adoption of adult behaviour. For instance, an autobiographical reminder task would be used by asking participants to write about a life event in which they felt they had behaved as adults (for an experimental illustration of autobiographical recall, see Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). They would then be asked to complete a questionnaire of intent to follow up the medical recommendations. A significant behavioural intention score according to the type of autobiographical recall would then reinforce the hypothesis of a causal link of the identification to health behaviours. An alternative and more ecological solution would be to measure the level of identification with the group of adults and to follow the development of the self-management behaviours through a prospective study. Future research should also replicate and extend this type of work to other specific groups of belonging and psychosocial skills, particularly from a perspective of comparison between different ideological contexts.

5. CONCLUSION

This research was a first attempt to show that the development of psychosocial skills promoting the self-management of a chronic disease is associated with the acquisition of a valued social identity in the ideological context of reference. Our findings emphasize the role of group identification, norms and values shared with this group, and the perceived social valorisation of these identity attributes in a patient's empowerment. Theoretically, we showed that the social identity approach can be useful for understanding the psychosocial mechanisms

of health behaviours in a context of chronicity. On an applied level, our research emphasizes the importance of taking into account the identity dynamics of patients engaged in therapeutic education programmes in order to define educational objectives more adapted to their identity context. For instance, this type of study could lead to the construction of indicators to operationalize psychosocial skills. Such work would then help us to design therapeutic education programmes and evaluation devices responding to certain expectations of patients. Studies with a more applied perspective of identity processes in chronic disease self-management would help to make recommendations for professionals engaged in therapeutic patient education more relevant and operative.

Ethical and deontological considerations

We respected the ethics code of the American Psychological Association (2002), and the ethics code for French psychologists (Collective, 2012). The recruitment was based on voluntary participation. The participant' responses treated in this research were anonymous and not particularly sensitive since we collected no nominal data.

Disclosure statement

No potential conflict of interest was reported by the authors.

2.3.2. Références

- American Psychological Association (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, 57, 1060–1073.
- Anderson, B. J., Wolpert, H. A. (2004). A developmental perspective on the challenges of diabetes education and care during the young adult period. *Patient Education and Counseling*, 53(3), 347–352. doi:10.1016/j.pec.2003.03.001
- Argyle, M. (2011). *The psychology of interpersonal behavior*. London: Penguin Books.
- Arnett, J.J. (1997). Young people's conceptions of the transition to adulthood. *Youth & Society*, 29(1), 3–23. doi:10.1177/0044118X97029001001
- Arnett, J.J. (2006). What does it mean to be an adult? Young people's conceptions of adulthood. In L. Batler, C.S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 471–489). New York: Psychology Press.
- Audulv, A., Asplund, K., & Norbergh, K.G. (2010). Who's in charge? The role of responsibility attribution in self-management among people with chronic illness. *Patient Education and Counseling*, 81, 94–100. doi:10.1016/j.pec.2009.12.007
- Best, S. J., Krueger, B., Hubbard, C., & Smith, A. (2001). An assessment of the generalizability of Internet surveys. *Social Science Computer Review*, 19(2), 131–145. doi:10.1177/089443930101900201
- Beauvois, J.-L. (2005). *Les illusions libérales, individualisme et pouvoir social* [Liberal illusions, individualism and social power]. Grenoble: Presses Universitaires de Grenoble.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. London: Routledge & Kegan Paul.
- Bourdieu, P. (1991). *Language and symbolic power*. Cambridge: Polity Press.
- Bourdieu, P. (1993). *Sociology in question*. London: Sage.

- Cameron, F. J., Amin, R., de Beaufort, C., Codner, E., & Acerini, C. L. (2014). Diabetes in adolescence. *Pediatric Diabetes, 15*(20), 245–256. doi:10.1111/pedi.12169
- Collective (2012). *Code de déontologie des psychologues*. Paris: SFP-ANOP-AEPU.
- Couper, M. (2000). Web surveys: A review of issues and approaches. *Public Opinion Quarterly, 64*(4), 464–494.
- Coventry, P.A., Fisher, L., Kenning, C., Bee, P., & Bower, P. (2014). Capacity, responsibility, and motivation: a critical qualitative evaluation of patient and practitioner views about barriers to self-management in people with multimorbidity. *Health Services Research, 14*, 536. doi:10.1186/s12913-014-0536-y
- Doise, W. (1986). *Levels of explanation in social psychology*. Cambridge: Cambridge University Press.
- Doise, W. (2011). The homecoming of society in social psychology. In J. P. Valentim (Ed.), *Societal approaches in social psychology* (pp. 9-34). Bern: Peter Lang.
- Falomir, J.M., & Invernizzi, F. (1999). The role of social influence and smoker identity in resistance to smoking cessation. *Swiss Journal of Psychology, 58*(2), 73–84. doi:10.1024//1421-0185.58.2.73
- Falomir, J. M., Toscani, L., & Despointes, S. H. (2009). Determinants of flu vaccination among nurses: the effects of group identification and professional responsibility. *Applied psychology: an international review, 58*(1), 42–58. doi:10.1111/j.1464-0597.2008.00381.x
- Fonte, D., Apostolidis, T., & Lagouanelle-Simeoni, M. C. (2014). Compétences psychosociales et éducation thérapeutique du patient diabétique de type 1 : une revue de la littérature [Psychosocial skills and therapeutic education of patients with Type 1 diabetes: A systematic review]. *Santé Publique, 26*(6), 763–777.

- Fonte, D., Colson, S., Côté, J., Reynaud, R., Lagouanelle-Simeoni, M. C., & Apostolidis, T. (2017). Representations and experiences of well-being among diabetic adolescents: Relational, normative, and identity tensions in diabetes self-management. *Journal of Health Psychology*. doi:10.1177/1359105317712575
- Fonte, D., Lagouanelle-Simeoni, M.-C., & Apostolidis, T. (2017). Les compétences psychosociales en éducation thérapeutique du patient : des enjeux pour la pratique du psychologue [Psychosocial skills in therapeutic patient education: issues for psychologists' practice]. *Pratiques Psychologiques*. doi:10.1016/j.prps.2017.01.005
- Foucault, M. (2008). *The Birth of Biopolitics*. New York: Palgrave Macmillan.
- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95(6), 1450–1566. doi:10.1037/a0012633
- Goeritz, A. S., & Schumacher, J. (2000). The WWW as a research medium: An illustrative survey on paranormal belief. *Perceptual & Motor Skills*, 90(3), 1195–1206. doi:10.2466/pms.2000.90.3c.1195
- Gordh, G., & Headrick, D.H. (2000). *A Dictionary of Entomology*. Wallingford: CABI Publishing.
- 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*. 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. *International Review of Social Psychology*, 28(2), 7–23.

- Hamzah, S. R., Suandi, T., Krauss, S.E., et al. (2014). Youth hedonistic behavior: Moderating role of peer attachment on the effect of religiosity and worldview. *International Journal of Adolescence and Youth*, 19(4), 419–433. doi:10.1080/02673843.2014.942793
- Hyman, H. H. (1942). The psychology of status. *Archives of Psychology*, 38, 5–94.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. New York, NY: McGraw-Hill.
- Iannotti, R. J., Schneider, S., Nansel, T. R., Haynie, D. L., Plotnick, L. P., Clark, L. M., Sobel, D. O., & Simons-Morton, B. (2006). Self-efficacy, outcome expectations, and diabetes self-management in adolescents with Type 1 diabetes. *Journal of Developmental and Behavioral Pediatrics*, 27(2), 98–105.
- Jackson, D. L. (2003). Revisiting sample size and number of parameter estimates: Some support for the N:q hypothesis. *Structural Equation Modeling*, 10(1), 128–141. doi:10.1207/S15328007SEM1001_6
- Jellison, J. M., & Green, J. (1981). A self-presentation approach to the fundamental attribution error: The norm of internality. *Journal of Personality and Social Psychology*, 40(4), 643–649. doi:10.1037/0022-3514.40.4.643
- Joffe, H., & Staerklé, 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
- Kals, E. (2001). Responsibility appraisals of health protection. In A.E. Auhagen, H.W. Bierhoff (Eds.), *Responsibility the many faces of a social phenomenon* (pp. 127–138). New York: Taylor & Francis Group.
- Kent, R., & Lee, M. (1999). Using the internet for market research: A study of private trading on the Internet. *Journal of the Market Research Society*, 41(4), 377–385.

- Kline, R. B. (2005). *Principles and practices of structural equation modeling*. New York: Guilford Press.
- Lange, K., Swift, P., Pankowska, E., et al. (2014). ISPAD clinical practice consensus guidelines 2014: Diabetes education in children and adolescents. *Pediatric Diabetes, 15*(20), 77–85. doi:10.1111/pedi.12187
- Luyckx, K., Moons, P., & Weets, I. (2011). Self-classification as an adult in patients with Type 1 diabetes: Relationships with glycemic control and illness coping. *Patient Education and Counseling, 85*(2), 245–250. doi:10.1016/j.pec.2010.11.013
- Maahs, D. M., West, N. A., Lawrence, J. M., & Mayer-Davis, E. J. (2010). Epidemiology of Type 1 Diabetes. *Endocrinology and Metabolism Clinics of North America, 39*(3), 481–497. doi:10.1016/j.ecl.2010.05.011
- McGraw, K. O., Tew, M. D., & Williams, J. E. (2000). An online psychology laboratory. In M. H. Birnbaum (Ed.), *Psychological experiments on the Internet* (pp. 219-233). San Diego: Academic Press.
- Miller, E. T., Neal, D. J., Roberts, L. J., Baer, J. S., Cressler, S. O., Metrik, J., & Marlatt, G. A. (2002). Test-retest reliability of alcohol measures: Is there a difference between internet-based assessment and traditional methods? *Psychology of Addictive Behaviors, 16*(1), 56–63. doi: 10.1037/0893-164X.16.1.56
- Nelson, L. J., Badger, S., & Wu, B. (2004). The influence of culture in emerging adulthood: Perspectives of Chinese college students. *International Journal of Behavioral Development, 28*(1), 26–36. doi:10.1080/01650250344000244
- Nelson, L. J., & Barry, C. M. (2005). Distinguishing features of emerging adulthood: The role of self-classification as an adult. *Journal of Adolescent Research, 20*(2), 242–262. doi:10.1177/0743558404273074

- Raveaud, M. (2010). Becoming an Adult in Europe: a socially determined experience. *European Educational Research Journal*, 9(3), 431–442. doi:0.2304/eerj.2010.9.3.431
- Reips, U. D. (2002). Standards for Internet-based experimenting. *Experimental Psychology*, 49(4), 243–256.
- Reysen, S., Katzarska-Miller, I., Nesbit, S. M., & Pierce L. (2013). Further validation of a single-item measure of social identification. *European Journal of Social Psychology*, 43(6), 463–470. doi:10.1002/ejsp.1973
- Rhéaume, J., Ladouceur, R., Freeston, M. H., & Letarte, H. (1995). Inflated responsibility in obsessive compulsive disorder: Validation of an operational definition. *Behaviour Research and Therapy*, 33(2), 159–169.
- Rose, N. (2000). Government and control. *British Journal of Criminology*, 40, 321–339. doi:10.1093/bjc/40.2.321
- Salkovskis, P., Shafron, R., Rachman, S., & Freeston, H. (1999). Multiple pathways to inflated responsibility beliefs in obsessional problems: Origins and implications for therapy and research. *Behaviour Research and Therapy*, 37(11), 1055–1072.
- Schmitt, A., Gahr, A., Hermanns, N., Kulzer, B., Huber, J., & Haak, T. (2013). The Diabetes Self-Management Questionnaire (DSMQ): Development and evaluation of an instrument to assess diabetes self-care activities associated with glycaemic control. *Health and Quality of Life Outcomes*, 11, 138. doi:0.1186/1477-7525-11-138
- Shadel, W.G., Mermelstein, R., & Borrelli, B. (1996). Self-concept changes over time in cognitive behavioral treatment for smoking cessation. *Addictive Behaviors*, 21(5), 659–663.
- Sheehan, K. B. (2001). E-mail survey response rates: A review. *Journal of Computer-Mediated Communication*, 6(2). doi:10.1111/(ISSN)1083-6101

- Sheehan, K. B., & McMillan, S. J. (1999). Response variation in e-mail surveys: An exploration. *Journal of Advertising Research*, 39(4), 45–54.
- Swift, P. G. (2009). Diabetes education in children and adolescents. *Pediatric Diabetes*, 10(12), 51–57. doi:10.1111/pedi.12187
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.
- Turner, J. C., & Reynolds, K. J. (2012). Self- categorization theory. In P. Van Lange, A. Kruglanski, & E. Higgins (Eds.), *Hand-book of theories in social psychology* (pp. 399-417). Thousand Oaks: Sage Publications.
- Vallet, O. (2007). *Petit lexique des mots essentiels* [Small lexicon of essential words]. Paris: Albin Michel.
- Vrangalova, Z., & Savin-Williams, R. C. (2011). Adolescent sexuality and positive well-being: A group-norms approach. *Journal of Youth and Adolescence*, 40(8), 931–944. doi:10.1007/s10964-011-9629-7
- WHO. (1997). *Programme on mental health. Life skills education in school*. Geneva: World Health Organization.
- WHO. (1998). *Therapeutic Patient Education*. Copenhagen: World Health Organization.
- WHO. (2003). *Skills for health. Skills-based health education including life skills: an important component of a child-friendly/health-promoting school*. Geneva: World Health Organization.
- Yalom, I. D. (1980). *Existential Psychotherapy*. New York: Basic Books.