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### Appraising Stigmatization and Discrimination: Construction and Validation of a Questionnaire Assessing Threat and Challenge Appraisals to Personal and Social Identity

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# Appraising Stigmatization and Discrimination: Construction and Validation of a Questionnaire Assessing Threat and Challenge Appraisals to Personal and Social Identity

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Building on research on identity and stress, the Primary Appraisal of Identity Threat scale was developed to assess situational appraisals of identity threats in terms of threats and challenges to personal and social identity. Study 1 tested the structure of the questionnaire: 230 participants with physical disabilities completed the 20 items of the Primary Appraisal of Identity Threat scale and a self-esteem measure. The aim of Study 2 was to replicate the structure with a heterogeneous sample facing discrimination and to validate the instrument by studying the relationships between scale scores and measures of personal and collective self-esteem, perceptions and attributions of discrimination, and suffering in connection with discrimination. The aim of Study 3 was to determine how women answered the questionnaire after their personal or social identity had been threatened versus not threatened. Across studies, findings were consistent with theory-based expectations.

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In recent decades, social psychologists have directed increased attention to models of the role stress plays in reacting to, and coping with, identity threats, particularly with regard to identity threats that arise from membership in negatively stereotyped or stigmatized groups (Barnes & Lightsey, 2005; Berjot & Gillet, 2011; Blascovich & Tomaka, 1996; Major & O'Brien, 2005; Miller & Kaiser, 2001; Miller & Major, 2000; Walsh & McGrath, 2000). Although this work represents considerable progress toward the understanding of identity-related situations, comparable advances have not been made with regard to how people appraise situations that threaten to discredit their self-image.

According to the transaction model developed by Lazarus and Folkman (1984), there are: (a) the recognition that something is at stake in a situation, and (b) the categorization of the situation as either a threat or a challenge (i.e., the primary appraisal phase). This distinction between appraising situations as either a threat or a challenge can be applied to events involving identity such as evaluative situations (i.e., exams, tests, competitions) or situations bringing into play group membership (i.e., discrimination, stigmatization). This model provides a basis for determining if a situation is indeed appraised as a threat or a challenge (i.e., there can be nothing at stake in an exam if I do not care about the subject), and also to distinguish and explore the kind of appraisal that is being made (a situation can be a threat or a challenge or both when there is as much to lose as to gain) and, in the specific case of identity-relevant situations, to assess if the appraisal is made relative to personal or social identity or both.

However, the concepts of threat and challenge have received limited attention for identity-related situations, except for studies using physiological measures (Blascovich & Tomaka, 1996; Vick, Seary, Blacovich, & Weisbush, 2008). In general, identity threats and challenges have been inferred from their consequences (e.g., out-group derogation, intragroup favoritism, coping strategies) or from indirect measures of variables presumed to go with those appraisals such as anxiety (Brown & Josephs, 1999; Keller & Dauenheimer, 2003; Osborne, 2001; Steele, Spencer, & Aronson, 2002) or evaluation apprehension (O'Brien & Crandall, 2003; Spencer, Steele, & Quinn, 1999; Steele & Aronson, 1995). However, in those studies, the distinction between identity threats and identity challenges was not made.

On the basis of the transactional model of stress and coping with identity threats (Berjot & Gillet, 2011; Berjot, Girault-Lidvan, & Battaglia, 2008) derived from the transactional stress model, the aim of this article is to present a tool allowing measurement of how individuals assess a specific situation in terms of being a threat or challenge to personal or social identity.

## The Model of Stress and Coping with Identity Threats

As in general stress and coping frameworks, the stress and coping with identity threatening situations model describes: (a) antecedents, (b) a cognitive appraisal phase (Is there something at stake in this situation? Is the situation a threat and/or a challenge? Do I have resources to cope with the situation?), and (c) coping responses. If the process is the same as the classical transactional model, each phase is adjusted to the specificities of identity-threatening situations. People do not assess and cope with identity-threatening situations in the same way that they assess and cope with more tangible threats to their well-being (e.g., work overload). Identity threats are more symbolic and engage the self (personal or social) with regard to the possibility of being devalued or denied. The characteristics of situations that may threaten identity are quite different from those that do not. The way in which situations are appraised reflects its meaning for one's identity. As individuals aim to protect or enhance identity, the coping strategies they employ are specific to those threats and to their appraisal. Since the model is presented in more detail elsewhere (Berjot & Gillet, 2011; Berjot et al., 2008), we will concentrate here only on the primary appraisal phase underlying the tool we propose.

### Threat and Challenge Appraisals of Stigmatization

Most authors view situations like discrimination or stigmatization, as well as specific events like tests or sports competitions, as threats to the personal or social identity of the individuals experiencing them (Crocker, Major, & Steele, 1998). However, those conceptualizations do not always take into account the person and the way that person may appraise such situations. What about people who do not think that something is at stake in a situation, as this is the case for people whose self-esteem is not contingent on the domain tested (Crocker & Park, 2004) or people who do not identify with their group (Sellers & Shelton, 2003)? What about victims of discrimination who do not want to perceive it, even if blatant (Feldman & Swim, 1998)? What about people who perceive discrimination even when it hardly occurs such as people high in stigma consciousness (Pinel, 1999)? Finally, what about people who appraise the situation as a challenge and an opportunity to enhance their identity?

A situation in which identity is perceived as being at stake can threaten or challenge the basic self-motive of maintaining, protecting, or enhancing the self (Baumeister, 1998; Sedikides & Strube, 1997), whether individual or collective. Thus, individuals will ask themselves: Can my identity (personal

or social) be called into question and devalued or, on the contrary, be enhanced, be praised, and become more positive? Put otherwise, is this situation a threat or a challenge to my personal or social identity?

Research on stigmatization and discrimination has focused mainly on threats, often ignoring that potentially discrediting situations can also be challenging (Cohen & Garcia, 2005; O'Brien & Crandall, 2003; Tomaka, Blascovich, Kliber, & Ernst, 1997) and elicit differing reactions. This is the case when people try their best to succeed in a task, or when members of low status groups try to modify the stereotype held by members of a relevant out-group in a favorable direction (Klein & Azzi, 2001). This is also the case when Black students who are highly identified to academics voluntarily expose themselves to an evaluative situation when under a stereotype threat (Cohen & Garcia, 2005). Viewing the situation as an opportunity to defend the image of their group by performing well allows them to challenge the negative stereotype. This does not mean that the situation is not threatening. Indeed, threat and challenge appraisals can sometimes be made simultaneously, as described in the transactional model of stress and coping (Carver & Scheier, 1994; Folkman & Lazarus, 1985; Smith & Ellsworth, 1987). This is particularly relevant for members of stigmatized groups who can get access to specific resources such as support from their group or identification with the group (Schmitt & Branscombe, 2002).

### Appraisals of the Personal or the Social Aspect of Identity

Within the social identity theory framework, *social identity* is an “extension of the self-concept that entails a shift in the level of self-representation from that of the individual self to that of the collective self” (Brewer, 2003, p. 481; see also Brewer & Gardner, 1996; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Individuals perceive the self as part of a larger unit, the group. Inversely, group membership is often conceived of as a part of the self. So, even if conceptually distinct, the personal and social aspects of identity are closely related, and are more closely related for some individuals than others. For example, Schmitt and Branscombe argued that threats to the social aspect of identity also threaten personal identity, especially for highly identified group members (Branscombe, Schmitt, & Harvey, 1999; Schmitt & Branscombe, 2002). As stated by Schmitt and Branscombe (2002), for highly identified people, group membership is an integral aspect of the self, often important, enduring and difficult to alter (e.g., gender). Therefore, any attack on one's group potentially leads to a negative personal evaluation. In the same way, Major and colleagues demonstrated that

perceptions of prejudice, which might be thought of as social identity threats, impact on self-esteem, indicating a threat to personal identity (Major, McCoy, Kaiser, & Quinton, 2003).

The personal and social aspects of identity are also more closely related in certain situations. This is, for example, the case in stereotype threat situations (Steele & Aronson, 1995; Crocker et al., 1998), which threaten both aspects of identity but often one more than the other, depending on subtle cues present in the situation (Shapiro, 2011; Shapiro & Neuberg, 2007; Wout, Danso, Jackson, & Spencer, 2008). Berjot (2003) and Berjot and Drozda-Senkowska (2003) found, for example, that different strategies are displayed depending on the way a test is presented to low socioeconomic status students. Although they used more personal identity management strategies when confronted with a test presented as a diagnostic test of their abilities (primarily a threat to personal identity), they used more collective strategies when asked to report their group membership prior to engaging in the task (an increased threat to social identity).

People who face potentially discrediting situations may or may not appraise the situation as being relevant to their identity. If relevant, the situation will then be appraised as a threat or a challenge to their personal or social identity, according to personal characteristics and situational cues. The tool we propose here aims at assessing those appraisals. Note, however, that we did not design this instrument to be a trait-like measure that would assess a general tendency to appraise situations as challenges or threats or a tendency to interpret situations at one level of categorization or the other (personal or social). Such measures already exist. This is, for example, the case for general primary appraisals (Berjot & Girault-Lidvan, 2009; Skinner & Brewer, 2002), for the sensitivity to identity-relevant situations such as stigma consciousness or expectations of rejection (Mendoza-Denton, Page-Gould, & Pietezak, 2006; Pinel, 1999), or for the importance of personal and social self-categorization (Nario-Redmond, Biernat, Eidelman, & Palenske, 2004). Because an appraisal is a transaction between an individual (with his or her own characteristics such as traits) and a specific situation, we believe that it is important to not reduce an identity-relevant encounter either to its inherently threatening aspects or to personal characteristics alone. All situations do not have the same meaning for all people. Therefore, we believe it is essential to verify how an individual appraises a specific situation, thus helping researchers and practitioners to better understand the effects of such situations in terms of health or well-being. Indeed, the effects of a situation, in terms of coping options or adjustment, will surely be different if the situation has been appraised as a challenge instead of a threat, or as impacting personal or social identity or both.

## These Three Studies

The overall aim of our three studies described below was to present and validate a preliminary version of the Primary Appraisal of Identity Threats (PAIT) instrument designed to assess how an individual appraises a specific situation in terms of threat or challenge to the personal or the social aspect of his identity. Study 1 presents the construction of the instrument and explores its structure. Studies 2 and 3 aim at demonstrating construct and external validity of the instrument. Study 2 employed a diverse sample of participants who were stigmatized. Study 3 was designed to demonstrate divergence of the scales under circumstances that made personal or social aspects of identity particularly salient.

## STUDY 1

### Method

#### *Item Development*

We propose in this study a scale of threat or challenge appraisals of identity-relevant situations. The scale assesses how an individual perceives a situation as a threat or a challenge to the integrity and the positivity of his personal or social identity. Item construction is based on the Lazarus and Folkman (1984) conceptualization of threat and challenge, adapted to personal and social identity (Tajfel & Turner, 1986).

The two threat subscales were formulated to express the fact that the individual versus the group member is depreciated, insulted, and denied. More particularly, the Threat to Personal Identity dimension ([TPI], 6 items) expresses the fact that the self can be called into question, threatened (in its integrity and positivity), or denied (e.g., "I had the feeling that I was considered as if I were nobody"). The Threat to Social Group Identity dimension ([TSGI], 5 items) expresses a threat to the positivity and distinctiveness of the identity (Tajfel & Turner, 1986; Brewer, 1991). It includes the feeling of being depreciated or insulted as a group member (e.g., "I had the feeling that members of my community/social group were insulted") and being evaluated only as a typical member of one's group (e.g., "This situation gave me the feeling of being judged as a typical member of my community/social group").

The two challenge subscales were formulated to express confidence that, with effort, the demand of a situation can be overcome (Lazarus & Folkman, 1984; Park & Folkman, 1997; Skinner & Brewer, 2002). Items on this dimension express an interest in the situation and a focalization on positive



outcomes that could come from it. The Challenge to Personal Identity dimension ([CPI], 4 items) expresses personal interest in the situation and thoughts about the consequences of being able to overcome the situation and take advantage of it (e.g., “I focused on the way I could take advantage of the situation”). The Challenge to Social Group Identity ([CSGI], 5 items) expresses challenge and feelings that, as a group member, the person can override the situation and succeed in defending the positivity of one’s group identity (e.g., “I was happy to show to what extent members of my social group and myself could deal with this kind of situation”) and the distinctiveness of one’s identity (e.g., “I had the feeling that I had to react as a typical member of my social group”).<sup>1</sup>

### *Participants and Procedure*

We recruited 230 people with disabilities from different associations (sports associations, professional associations, but not associations having to do with the defense of rights or opposing discrimination) and from personal acquaintances. These participants completed a series of questionnaires, including the French version of the PAIT. To ensure the relevance of the situation and to elicit both aspects of identity, the participants were asked to describe a situation in which something was at stake for the person as an individual or because of his or her disability: “Please, report below an event or a situation (or think of one) that has been a problem to you, and that particularly touched you as an individual and/or as a member of your group due to the fact that you are physically disabled.” After having described an event, participants answered the 20 items of the PAIT, using a 5-point Likert-type scale with anchors ranging from 1 (*do not agree at all*) to 5 (*totally agree*). Among the 230 participants, 48 were women and 182 were men ( $M = 37.57$ ,  $SD = 8.79$ ,  $mini = 21$ ,  $maxi = 61$ ). All had physical disabilities: paraplegia ( $n = 86$ ), hemiplegia ( $n = 24$ ), amputation ( $n = 37$ ), cerebral-motor disabilities ( $n = 17$ ), poliomyelitis ( $n = 16$ ), paralysis (unknown type;  $n = 5$ ), myopathy ( $n = 3$ ), deafness and blindness ( $n = 4$ ). Nine participants did not state their disability.

### *Additional Measures*

To assess the relations of our measure with an external criterion, we also asked participants to fill out the 10 items of the French version of the Rosenberg Self-Esteem Scale (Vallières & Vallerand, 1990). People had to rate how strongly they agreed on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*).

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<sup>1</sup>The dimensions have different numbers of items due to the problem of redundancy.

## Results and Discussion

### *Exploratory Principal Component Analysis of the PAIT*

An exploratory principal components analysis with an oblimin rotation was conducted on the 20 items of the PAIT to determine the latent structure of the tool. The analysis yielded a four-factor solution explaining 82.18% of the total variance (with eigenvalues superior to 1). Factor 1 explained 51.57% of the total variance and gathered all Threat to Personal Identity items. Factor 2 explained 15.60% of the total variance and gathered all Threat to Social Group Identity items. Factor 3 explained 7.60% of the total variance and gathered all Challenge to Social Group Identity items. Factor 4 explained 7.43% of the total variance and gathered all Challenge to Personal Identity items. Note that all loadings are higher than .75 and that all items loaded only on their factor (see Table 1). Thus, our results show that the PAIT has satisfactory psychometric properties and that all items fit to their respective dimensions.

### *Descriptive Statistics*

As shown in Table 2, mean ratings of each of the four subscales of the PAIT are situated one point above the theoretical middle of the scale and standard deviations vary around one scale point. The score of self-esteem is relatively low. Alphas are high for this sample, ranging from .92 to .95. The Cronbach alpha for the entire scale is .71.

Threat and challenge are negatively correlated, which is consistent with what is generally found in the general stress and coping literature. Moreover, the analysis of correlations showed that both aspects of identity are positively correlated, demonstrating that the social identity of our sample of people with disabilities is closely linked to their personal identity. Moreover, as expected, challenge appraisals are positively correlated with self-esteem ( $r = .56$  and  $.56$ ) whereas threat appraisals are negatively correlated with self-esteem ( $r = -.82$  and  $-.60$ , respectively for TPI and TSGI).

## STUDY 2

The first aim of Study 2 was to explore further the structure of the scale with a heterogeneous sample having experienced a discrimination situation. The second aim was to examine the relations between the PAIT and other measures such as perception of discrimination, suffering, personal self-esteem, collective self-esteem (membership, private and public self-esteem, identity; Luhtanen & Crocker, 1992), and coping strategies, specifically individual mobility, competition, and attribution to discrimination.

TABLE 1  
Exploratory Principal Component Analysis on the PAIT Scale

| <i>The Primary Appraisal of Identity Threat (PAIT)</i>   | <i>TPI</i> | <i>TSGI</i> | <i>CSGI</i> | <i>CPI</i> |
|--|------------|-------------|-------------|------------|
| 1. I thought about the consequences of being able to overcome this situation (item 15)                                       |            |             |             | .877       |
| 2. I was happy to be able to test my capacities to deal with this kind of situation (item 4)                                 |            |             |             | .911       |
| 3. I experienced this situation as if I had to take up a personal challenge (item 6)   |            |             |             | .827       |
| 4. I focused on the way I could take advantage of the situation (item 9)   |            |             |             | .945       |
| 5. I thought I was able to defend my social group interests (item 11)  |            |             | .926        |            |
| 6. I had the feeling that I had to react as a typical member of my social group (item 16)                                    |            |             | .841        |            |
| 7. I experienced the situation as if I had to take up the challenge as a member of my social group (item 17)                 |            |             | .899        |            |
| 8. I was happy to show to what extent members of my social group and myself could deal with this kind of situation (item 19) |            |             | .889        |            |
| 9. This situation gave me the will to fight to defend my group identity (item 5)   |            |             | .899        |            |
| 10. I said to myself that I couldn't measure up (item 1)   | .801       |             |             |            |
| 11. I had the feeling to be reassessed as a person (item 12)   | .757       |             |             |            |
| 12. I was worried of not being able to cope with this situation (item 14)  | .903       |             |             |            |
| 13. I felt an attack on my integrity as a person (item 18)   | .898       |             |             |            |
| 14. I had the feeling that I was considered as if I were nobody (item 20)  | .840       |             |             |            |
| 15. I experienced this situation as a threat to my personal identity (item 8)  | .942       |             |             |            |
| 16. I experienced this situation as a threat to my group/social identity (item 10)   | .302       | .696        |             |            |
| 17. I had the feeling that the members of my group including myself were totally depreciated (item 13)                       |            | .981        |             |            |
| 18. I had the feeling that members of my community/social group were insulted (item 2)                                       |            | .758        |             |            |
| 19. I had the feeling that the situation was an attack to my position as a member of my community/social group (item 3)      |            | .852        |             |            |
| 20. This situation gave me the feeling of being judged as a typical member of my community/social group (item 7)             |            | .944        |             |            |

*Note.* Only factors loadings superior to .30 are shown. TPI=Threat to Personal Identity; TSGI=Threat to Social Group Identity; CPI=Challenge to Personal Identity; CSGI=Challenge to Social Group Identity.

TABLE 2  
 Study 1: Means, Standard Deviations, Correlations Between Measures and Subscales, and Alphas ( $n=230$ )

|                                    | <i>M</i> | <i>SD</i> | <i>TPI</i> | <i>TSGI</i> | <i>CPI</i> | <i>CSGI</i> | <i>Self-Esteem</i> | <i>Alpha</i> |
|------------------------------------|----------|-----------|------------|-------------|------------|-------------|--------------------|--------------|
| Threat to Personal Identity        | 3.28     | 1.12      | —          | .62*        | -.53*      | -.55*       | -.82*              | .96          |
| Threat to Social Group Identity    | 3.37     | 1.00      |            | —           | -.32*      | -.33*       | -.60*              | .94          |
| Challenge to Personal Identity     | 3.44     | 1.12      |            |             | —          | .59*        | .56*               | .93          |
| Challenge to Social Group Identity | 3.38     | 1.18      |            |             |            | —           | .56*               | .95          |
| Self-Esteem                        | 2.42     | 0.59      |            |             |            |             | —                  | .90          |

*Note.* TPI=Threat to Personal Identity; TSGI=Threat to Social Group Identity; CPI=Challenge to Personal Identity; CSGI=Challenge to Social Group Identity.

\* $p < .001$ .

### Relations with Discrimination, Suffering, and Self-Esteem

Given the literature on stigmatization and more broadly on identity, and the specific situation that our participants had to deal with, we believe that global self-esteem, as a measure of individual self, would be more strongly linked to appraisals concerning personal identity (TPI and CPI) than those concerning social identity (TSGI and CSGI). Moreover, as previous research has shown, we expected that the link between self-esteem and perception of discrimination would be negative and low or nonexistent (Bourguignon, Seron, Yzerbyt, & Herman, 2006; Luhtanen & Crocker, 1992; Schmitt & Branscombe, 2002).

In addition, we expected that relations between the PAIT and collective self-esteem would be different according to the aspect of self-esteem that we assessed. Membership (how worthy a member of one's group someone is) and private self-esteem (personal judgment of how good one's social group is), could be protective to the kind of threat induced by discrimination and so should be positively correlated with challenge to social identity appraisals (Schmitt & Branscombe, 2002). It is difficult to predict the relations between private self-esteem and threat appraisal. Indeed, if collective self-esteem can protect from the negative effects of discrimination, this does not mean that discrimination is not perceived as a threat. It may well be. We will explore that hypothesis by looking at our measure of suffering.

Public self-esteem corresponds to the way someone thinks that members of his or her group are perceived by society (i.e., if they think they are respected, liked, and worthy). This aspect of self-esteem may be closely linked to the perception of being stigmatized and, thus, be closely related

to stigma consciousness (Pinel, 1999). People who have low public self-esteem may perceive more discrimination in a situation (Luhtanen & Crocker, 1992) and appraise it as more of a threat than a challenge (Pinel, 1999). Moreover, given the direct reference to group membership, it may also be linked to personal and social aspects of identity (Schmitt & Branscombe, 2002). The identity subscale, which corresponds to the importance of one's social group membership to one's self-concept, is more related to identification. Although this specific measure of identification has not been found to be linked to perception of discrimination, we believe that, as an important part of self, this subscale may be correlated with suffering and the personal aspect of identity.

### Relations with Coping Strategies

To study the relations between appraisal and coping, we chose to assess three identity management strategies. Two were chosen from social identity theory: individual mobility and competition (Tajfel, 1978). Individual mobility (i.e., trying to leave one's group for one more positively evaluated) is an individual strategy because the outcome modifies the individual (and not social) status of the person (Blanz, Mummendey, Mielke, & Klink, 1998). This strategy then would be linked to personal identity threat. Competition is a strategy that aims at changing the status of the group in a positive way. Group members who engage in competition do so to enhance the positivity of their group. This strategy might then be linked to a challenge appraisal, especially to social identity.

The third coping strategy considered here, attribution to discrimination, was proposed by Crocker and Major (1989): people attribute negative feedback or poor outcomes to prejudice and discrimination. According Crocker and Major (1989), attribution to discrimination is a self-protective strategy. However, other researchers have shown that this strategy threatens the social aspect of identity. Indeed, attributing an event to discrimination reminds the person that he or she is a member of the group (Schmitt & Branscombe, 2002). Since group membership is a central aspect of the self, attribution to discrimination might then be appraised as a threat to personal and social identities.

### Method

#### *Participants and Procedure*

One hundred ninety-one participants completed the PAIT. Participants were mostly students and their relatives (some participants were asked to give the

questionnaire to relatives). Among the 191 participants, 70 were men and 120 were women (1 did not report gender). Mean age was 24.07 years ( $SD = 6.35$ ); the youngest was 16 years old and the oldest 64 years old. They reported discrimination based on cultural origin ( $n = 57$ ),<sup>2</sup> homosexuality ( $n = 62$ ), gender ( $n = 22$ ), social origin ( $n = 20$ ), physical appearance (mostly being very small,  $n = 11$ ), religion ( $n = 8$ ), being overweight ( $n = 4$ ), physical disabilities ( $n = 2$ ), and “other” criteria such as being a drug addict or being too young ( $n = 5$ ). To assess the relations between the PAIT and external criteria, 58 participants who had been discriminated against for varying reasons (4 overweight, 2 disability, 15 foreign origin, 20 homosexual, 6 women, 7 physical appearance, and 4 “other reasons”) completed several additional measures.

### Measures

All participants were first asked to report a situation in which they experienced discrimination: “Please, report below an event or a situation that particularly touched you as an individual and/or as a member of your group, in which you have experienced discrimination.” They were then asked to complete the PAIT in reference to the event they reported.

Two supplementary questions explored the extent to which participants *perceived discrimination* against themselves and *suffered* from this discrimination: (a) “To what extent do you think that you were discriminated against?” and (b) “To what extent did this situation make you suffer.” These questions employed a response scale ranging from 1 (*not at all*) to 7 (*totally*).

*Personal self-esteem* was assessed with the French version of the Rosenberg Self-Esteem Scale (Vallière & Vallerand, 1990; Cronbach alpha = .85). Participants answered the 10 items of the scale on a 4-point Likert-type scale ranging from 1 (*not at all*) to 4 (*totally*).

The four subscales of Luhtanen and Crocker’s (1992) Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) were employed: Membership Esteem (4 items; Cronbach alpha = .75), Private Collective Self-Esteem (4 items; Cronbach alpha = .83), Public Collective Self-Esteem (4 items; Cronbach alpha = .72), and Identity (4 items; Cronbach alpha = .52). Participants answered the 16 items of the scale on a 7-point Likert-type scale ranging from 1 (*not at all*) to 7 (*totally*).

With respect to the assessment of coping strategies, two of the items assessed *individual mobility*: “If I could not be as I am (a member of that group), I’ll do it;” “I intend or I try to definitively leave this group.” Three items assessed *competition*: “This situation made me want to fight to defend

<sup>2</sup>Most members of this subgroup originated from Maghreb (Morocco, Algeria, and Tunisia).

the interest of people like me;" "I intend to lodge a complaint to an association or to a justice court;" "I wanted to join an organization that fights for the rights of my group." Two items assessed *attribution to discrimination*: "I thought that what happened to me in that situation was largely due to prejudice;" "I told myself that if I didn't get what I wanted from this situation, this was because of prejudice of others toward people like me." Participants answered on a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*totally*).<sup>3</sup>

## Results and Discussion

### *Descriptive Statistics and Correlations among PAIT Scales*

As with our sample of people with disabilities, scores on the four subscales of the PAIT were situated around a mean of 3 (3.13 to 3.60) and a standard deviation of 1 (.91 to 1.01). Cronbach alphas were .76 for TPI, .78 for TSGI, .71 for CPI, and .84 for CSGI. As shown in Table 3, the pattern of correlations among the subscales is somewhat different from those found in Study 1. Challenge to Personal Identity was positively linked to Challenge to Social Group Identity ( $r = .57$ ), but not linked to other appraisals. Threat to Personal Identity was linked to Threat to Social Group Identity ( $r = .37$ ). Moreover, we found that Threat to Social Group Identity was positively linked to Challenge to Social Group Identity ( $r = .42$ ), meaning that both appraisal were made concomitantly.

### *Exploratory Principal Components Analysis*

An exploratory principal components analysis (varimax rotation) ran on the data yielded four factors, explaining 56.82% of the total variance. All items loaded on their respective dimension, loadings ranging from .53 to .72 for TIP, from .61 to .75 for TSGI, from .48 (item 15) to .75 for CPI, and from .67 (item 15) to .79 for CSGI. So, although the loadings were not as high as they were with an homogeneous population (Study 1), results of this study, which was run with a more heterogeneous sample, replicated the structure of the scale.

### *Relations to Other Measures*

As for the relations between the PAIT and other measures, we can see that, confirming our hypothesis, global self-esteem was linked more to personal

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<sup>3</sup>Since the internal consistency of the Identity subscale is low, results concerning that subscale should be interpreted with caution.

TABLE 3  
Study 2: Means, Standard Deviation, Cronbach Alphas, and Correlations  
Among Scales ( $n = 191$ )

|                                    | <i>M</i> | <i>SD</i> | <i>Alpha</i> | <i>TPI</i> | <i>TSGI</i> | <i>CPI</i> | <i>CSGI</i> |
|------------------------------------|----------|-----------|--------------|------------|-------------|------------|-------------|
| Threat to Personal Identity        | 3.15     | 0.91      | .76          | —          |             |            |             |
| Threat to Social Group Identity    | 3.60     | 0.94      | .78          | .37*       | —           |            |             |
| Challenge to Personal Identity     | 3.13     | 1.00      | .71          | -.03       | .13         | —          |             |
| Challenge to Social Group Identity | 3.25     | 1.01      | .84          | .05        | .42*        | .57*       | —           |

Note. TPI=Threat to Personal Identity; TSGI=Threat to Social Group Identity; CPI=Challenge to Personal Identity; CSGI=Challenge to Social Group Identity.

\* $p < .001$ .

appraisals than to social appraisals. More particularly, as shown in Table 4, global self-esteem was positively linked to Challenge to Personal Identity and negatively linked to Threat to Personal Identity. The relation between perception of discrimination and self-esteem was low ( $r = -.17$ ) and non-significant. Note that perception of discrimination was positively linked to Threat to Social Group Identity ( $r = .40$ ), whereas suffering was more strongly linked to Threat to Personal Identity ( $r = .65$ ).

As for the relation between PAIT and collective self-esteem, results showed that group membership and private self-esteem were positively correlated to Challenge to Social Group Identity ( $r = .48$  and  $.32$ ) and negatively correlated to Threat to Personal Identity ( $r = -.29$  and  $-.36$ ), suggesting that

TABLE 4  
Study 2: Correlations Between Scores on the PAIT, Perceptions of Discrimination,  
Suffering, Self-Esteem (Global and Collective), and Coping Strategies

|                                   | <i>TPI</i> | <i>TSGI</i> | <i>CPI</i> | <i>CSGI</i> |
|-----------------------------------|------------|-------------|------------|-------------|
| Perceptions of discrimination     | .24        | .40**       | .10        | .18         |
| Suffering                         | .65***     | .20         | -.07       | -.09        |
| Personal self-esteem              | -.43**     | -.08        | .33*       | .21         |
| Collective self-esteem membership | -.29*      | .00         | .20        | .48**       |
| Private                           | -.36**     | .27         | .17        | .32*        |
| Public                            | -.40**     | -.23        | -.13       | -.07        |
| Identity coping strategies        | -.03       | .17         | .21        | .40**       |
| Attribution to discrimination     | .27*       | .29*        | .05        | .01         |
| Individual mobility               | .38**      | -.14        | -.29*      | -.31        |
| Competition                       | -.04       | .07         | .29*       | .39**       |

Note. PAIT=the Primary Appraisal of Identity Threat; TPI=Threat to Personal Identity; TSGI=Threat to Social Group Identity; CPI=Challenge to Personal Identity; CSGI=Challenge to Social Group Identity.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



those aspects of collective self-esteem are indeed protective. Private self-esteem was also positively correlated with Threat to Social Group Identity; that is, people who were happy with their group membership did appraise discrimination as a threat to their social identity. To this end, results also showed that public self-esteem was more strongly, negatively correlated to personal than to social threats. It was also negatively linked to the perception of discrimination and the suffering experienced during the situation. That is, the less people thought that their group was positively perceived, the more they perceived discrimination and appraised it as a threat.

As for the identity subscale, results showed that this aspect of collective self-esteem was positively linked only to challenge appraisals: the more a person identified with his or her group, the more they appraised discrimination as a challenge, to their social identity ( $r = .46$ ) and to their personal identity ( $r = .26$ ). This is in agreement with research showing that in-group identification is self-protective (Schmitt & Branscombe, 2002).

The results also showed specific relationships between appraisals and coping strategies. More specifically, we found that individual mobility was, as anticipated, positively linked to threat to the personal aspect of identity ( $r = .38$ ) and negatively linked to challenge ( $r = -.29$ ). This is not surprising given the formulation of the challenge subscales. Indeed, if a person intends to leave their group, there is no reason for them to experience the situation as a challenge for the group or to focus on the positive consequences of the situation (since they will not encounter those situations if they are no longer a member of the group). As for the competition strategy, we found, as expected, that it was linked to challenge appraisals and not to threat appraisals. Finally, attribution to discrimination was linked to each kind of threat appraisals (respectively,  $r = .27$  and  $.29$  for the personal and social aspects of identity).

These results show that the PAIT subscales were distinctively linked to an array of other variables. On one hand, some results showed the pertinence of the distinction we made between challenge and threat. Positive issues such as self-esteem were positively linked to challenge and negative issues with threat. These results also highlight the relevance of distinguishing between the personal and social aspects of identity. Indeed, for example, whereas suffering was linked to the Threat to Personal Identity, discrimination (which concerns the collective self) was linked to the Threat to Social Group Identity. Finally, those results showed that according to the way people appraise discrimination, they use specific coping strategies. In particular, the use of attribution to discrimination was linked to threat appraisals to personal and social aspects of identity whereas a more individual strategy such as individual mobility was specifically linked to Threat to Personal Identity. Competition, which is a group strategy, was linked to challenge appraisals, especially to their social aspects.

## STUDY 3

The aim of Study 3 was to see how people threatened versus nonthreatened on their personal versus social identity responded to the scale. If our scale measures what it is supposed to measure, we should observe a higher rating on the dimension of the scale corresponding to the threatened part of the identity.

To enhance its external validity, two identity management strategies were also assessed. *Claimed self-handicapping*, which is traditionally used to cope with self-esteem threats in situations that are uncertain and important for the self (Berglas & Jones, 1978; Snyder, Smith, Augelli, & Ingram, 1985), was used as a response to personal threats. It consists of reporting obstacles such as stress, anxiety, bad conditions to discount one's responsibility in case of failure (Finez, Berjot, & Rosnet, 2011). Response to social identity threat was assessed via *devaluation of threatened dimensions*. It consists of selectively devaluing or regarding as less important for self-definition a dimension on which the group fares poorly (Crocker & Major, 1989). According to this literature on identity management strategies, we hypothesized that compared to a situation with no threat, women having to deal with a situation that threatens their personal identity would use more self-handicapping whereas women having to deal with a threat to their social identity would use more the devaluation strategy.

## Method

### *Participants and Procedure*

Sixty-six female students from the University of Reims volunteered to participate in this experiment. They were in the first, second, or third year of psychology, literature, or economics studies. Their mean age was 19.80 years ( $SD = 2.43$ ) and ranged from 18 to 32 years. Psychology students were chosen mostly from first year to avoid any knowledge either of the task or of the situation. Participants were individually tested at the laboratory. To test our hypothesis, we chose a situation known to arouse personal as well as social concerns; namely, the stereotype threat paradigm. Several authors have shown that the different operationalizations of this situation can make it more salient to either the personal or social aspects of identity (Berjot, 2003; Berjot & Drozda-Senkowska, 2003; Shapiro & Neuberg, 2007; Wout et al., 2008). Although participants in the personal threat situation were told that they were going to take a test measuring intelligence (which makes salient the personal aspect of identity), those in the social threat situation were told that they were going to take an intelligence test for which women had

generally lower performance (which makes salient the social aspect of identity). Participants in the no-threat condition were told that they were going to participate to the validation of a tool that was part of a larger instrument measuring motivation at work. All participants were then asked to look at a complex geometrical figure (the Rey's figure) for 60 seconds and to reproduce it later within 3 minutes on a piece of paper after having made a mental rotation of 180 degrees (for uses of this figure, see Berjot, Girault-Lidvan, Scharnitzky, & Gillet, 2010; Berjot, Roland-Levy, & Girault-Lidvan, 2011; Huguet, Brunot, & Monteil, 2001). The task was complex enough to make credible an intelligence measure as well as a motivation task since it necessitates speed and concentration. After the task, participants were asked to answer the PAIT regarding how they felt during the task.

## Measures

### *Performance*

Performance on the corrected Rey's figure was calculated according to the standard procedure (see Huguet et al., 2001): two points for a well-reproduced and well-placed unit, one point for a well-placed and incorrectly reproduced unit (but recognizable), and one-half point for an incorrectly placed and incorrectly reproduced (but recognizable) unit. The maximum score is 44 points.

### *Primary Appraisals*

Primary appraisals were assessed with the PAIT scale. The Cronbach alpha for the entire scale was .87; for the subscales, it was .72 for the TPI, .85 for the TSGI, .62 for the CPI, and .89 for the CSGI.

### *Identity Management Strategies*

Strategies for identity management were assessed with six items, three assessing self-handicapping (e.g., "Indeed, I think I was not feeling very well that day," Cronbach alpha = .73) and three assessing dimension devaluation (e.g., "I tried to tell myself that all things being considered, that area was not very important to me," Cronbach alpha = .75).

## Results and Discussion

### *Performance*

To determine whether the conditions had an effect on performance, an analysis of variance (ANOVA) was conducted with condition (personal

threat vs. social threat vs. no threat) as the independent variable and performance as the dependant variable. Results showed no effect of condition on performance,  $F(2, 62) = .15, p = ns$ .

### Appraisals

To determine whether the threatening conditions had an effect on the corresponding dimension of the PAIT, an ANOVA was conducted with the condition (personal threat vs. social threat vs. no threat) as the independent variable and the corresponding dimensions of the PAIT as the dependant variable. As shown in Figure 1, results revealed no significant effects of condition on TPI ( $F(1, 62) = 2.20, p = ns$ ). Nevertheless, as anticipated, the comparison between the personal identity threat and the no-threat condition showed that women under personal threat assessed the situation as more personally threatening ( $M = 2.40, SD = .66$ ) than women in the no-threat condition ( $M = 2.01, SD = .45; F(1,36) = 4.40, p < .05$ ).

Results revealed a significant effect of condition on TSGI ( $F(1, 62) = 11, p < .001$ ); women in the social threat condition assessed the situation as being more socially threatening ( $M = 2.14, SD = .86$ ) than women in the personal threat condition ( $M = 1.47, SD = .42$ ) or women in the no-threat condition ( $M = 1.33, SD = .35$ ).

Finally, results revealed no significant effect of condition on CPI and a significant effect on CSGI,  $F(1, 62) = 5.93, p < .01$ , showing that women under threat to their personal and social identity (respectively,  $M = 2.30,$

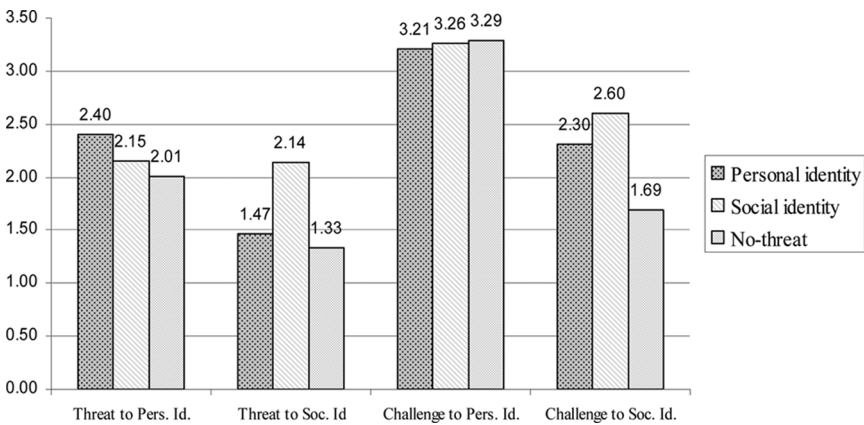


FIGURE 1 Threat and challenge appraisals according to the type of identity threat induced by the situation (Study 3).

$SD = .80$ , and  $M = 2.60$ ,  $SD = .93$ ) assessed the situation as a higher challenge to their social identity than women in the no-threat condition ( $M = 1.69$ ,  $SD = .76$ ).

### *Coping*

To determine to what extent each of the two strategies was used according to the type of threat induced by the situation, we ran a measures analysis of variance (MANOVA) on the two strategies with condition (personal threat vs. social threat vs. no threat) as the independent variable. Results showed a trend,  $F(4, 122) = 2.37$ ,  $p = .06$ . Univariate  $F$  values showed a marginal effect of condition on self-handicapping,  $F(2, 62) = 2.38$ ,  $p = .10$ , and on dimension devaluation,  $F(2, 62) = 2.40$ ,  $p = .10$ . Planned comparison showed that participants under personal threat used more self-handicapping ( $M = 2.13$ ,  $SD = .74$ ) than participants under social threat ( $M = 1.73$ ,  $SD = .52$ ,  $p < .03$ ). They also showed that participants in the social threat condition ( $M = 2.51$ ,  $SD = .69$ ) tended to devalue more the domain than those in personal threat condition ( $M = 2.13$ ,  $SD = .69$ ;  $p = .07$ ). However, no differences were found between the social threat condition and the no-threat condition.

The aim of Study 3 was to test whether a situationally induced threat to certain aspects of identity would yield an assessment of a corresponding threat on the PAIT. This was the case for threat appraisals. Women under threat to the personal aspect of their identity assessed the situation as more personally threatening than women under no threat. In the same way, women under threat to the social aspect of their identity scored higher on the social identity subscale than women under no threat.

For the challenge appraisals, although our results showed coherent results on the Challenge to Social Group Identity measure, they did not show a significant effect of condition on the Challenge to Personal Identity measure. Instead, women in all conditions appraised the situation as a challenge to their personal identity, the rating being relatively high compared to ratings on other appraisals. One explanation might be that, as students, those women were accustomed to being tested. Moreover, as university students largely invested in their studies, they might have more easily appraised test situations as challenges, even if these included an aspect of threat, possibly due to the uncertainty and novelty of the situation. Another possibility is that our situations were not threatening enough to undermine a challenge appraisal. Although real situations (e.g., real exams or competitions) might not yield such a high challenge appraisal, our results confirmed the fact that threat and challenge appraisals are not mutually exclusive and might be made concomitantly.

## GENERAL DISCUSSION

The aim of these three studies was to provide a preliminary evaluation of the construction and validation of the PAIT questionnaire by testing its structure, construct, and external validity. Results tended to show that this measure of primary appraisals has satisfactory psychometrical properties and reveals a social reality shared by people who encounter identity-threatening situations. Indeed, results from factorial analysis yielded the four expected dimensions with relatively high Cronbach alphas. This structure was replicated with a more heterogeneous sample having to face a specific threatening situation: discrimination.

Moreover, results of Studies 2 and 3 demonstrated that the relationship between the PAIT and other related constructs are coherent and specific. One aim of Study 2 was to assess construct validity using a correlational design, to examine the relationship between the PAIT and self-esteem (personal and collective), appraisals of suffering, perceptions of discrimination, and some coping strategies. Results showed the expected patterns of relations. For example, suffering was linked to personal identity threats whereas discrimination was linked to social identity threats. Strategies that group members used to cope with discrimination were also specifically linked to appraisal. For example, attribution to discrimination, which is a self-protective strategy that also reminds people about their group membership was positively correlated with Threat to Social Group and Threat to Personal Identity. In contrast, individual mobility, which is an individual strategy, was specifically correlated with Threat to Personal Identity. Finally, competition, which is a more proactive collective strategy, is correlated with Challenge to Social Group Identity. Those results then underline the specificity of appraisals and the need to distinguish between them.

Results from Study 3 showed that the PAIT is sensitive to situational cues. Indeed, although a situation that threatens social identity leads to an appraisal in terms of social identity threat, a situation that threatens personal identity leads to an appraisal in terms of personal threat. Moreover, strategies used to cope with those situations are specific to the type of threat induced. Although a situation that threatens personal identity leads to the use of self-handicapping, a situation that threatens social identity leads participants to devalue the domain that was evaluated.

These results also highlight the malleability of appraisals. As for regular appraisals (i.e., appraisals of a situation that is nonrelevant for identity), challenge and threat appraisals can be made simultaneously (Carver & Scheier, 1994; Lazarus & Folkman, 1984; Skinner & Brewer, 2002). Despite the fact that those positive correlations have rarely been reported in the literature, we can find some occurrences of it. For example, Folkman and

Lazarus showed that students waiting for an exam appraised the upcoming event as particularly threatening and challenging (Folkman & Lazarus, 1985). In another study with students outside of an exam period, we showed that challenge was negatively and very moderately correlated to threat ( $r = -.17$ ; Berjot & Girault-Lidvan, 2009). As for general situations, identity-relevant situations can also be threatening and challenging. We can imagine many situations in which a person has as much to lose as to gain, for example, sports competitions. This may be why such coping strategies as self-handicapping are so much used by sports competitors (Finez et al., 2011). As for identity-relevant situations, one might think that challenge and threat appraisal might be made simultaneously. Indeed, we found in Study 2 that Threat to Social Group Identity was positively correlated with Challenge to Social Group Identity. So, some situations, as may be the case with discrimination might be assessed as both a challenge and a threat. However those kinds of “double” appraisals might also be made more spontaneously by some group members than others. Despite that, such results were not present here given the low number of participants in each subgroup. We found that although threat and challenge appraisals (in terms of social identity) were positively correlated for homosexuals ( $n = 57$ ) and people of foreign origin ( $n = 62$ ),  $r = .36$  and  $.44$ , respectively, threat and challenge appraisals (in terms of personal identity) were negatively correlated for women ( $n = 22$ ),  $r = -.43$ . As for people from low socioeconomic backgrounds ( $n = 20$ ), challenge and threat to social identity were negatively and strongly correlated,  $r = .74$ . So, here we see that each group can appraise discrimination in a different way.

The evidence obtained in the three studies tends to show that the PAIT scale has internal and external validity. Nevertheless, more research is needed to further document its validity. Since multiple convergent proofs contribute to validity of a tool (Dickes, Tournois, Flieller, & Kop, 1994), we can conceive an experiment designed to test how people react to situations presented as a threat versus a challenge. Therefore, it could be important to study some individual characteristics that usually favor appraisals in terms of challenge (e.g., optimism) and examine the role they can play on identity appraisals.

Note, however, that this scale is a first attempt to assess how people appraise *identity-relevant situations*, broadly defined as a threat or a challenge to their personal or social identity (in their positivity, integrity, and distinctiveness). Group members can be threatened when their social identity is discredited and devalued (i.e., threats to the value of social identity) and also when they are placed (or not) in some category against their will. Our scale does not assess that kind of threat because we chose to select only participants who agreed to place themselves in a category. The PAIT does

not assess the source of the threat. Indeed, as stated by Shapiro in her conceptualization of stereotype threat (Shapiro, 2011; Shapiro & Neuberg, 2007), a situation can be appraised as a threat by oneself or by others (either by in-group or out-group members). This is especially pertinent in the stereotype threat paradigm, which concerns specifically evaluative situations. This might not be as easy to assess or conceptually grasp for more broadly defined identity-relevant situations.

We believe that this first attempt represents a change in the way identity threats can be considered. As mentioned earlier, identity-relevant situations are very specific and need special attention. The mere application of traditional stress and coping models cannot fully explain the entire range of reactions and coping strategies people use when under threats to their identity and their consequences (e.g., low self-esteem, anxiety, or depression). This is particularly evident when looking at the literature on coping. Strategies described in traditional models of stress are very different from those described in the literature on stigmatization or more generally on identity management. Dealing with a fight or with a car accident is not the same as dealing with discrimination or interpersonal rejection (Berjot & Gillet, 2011). Given the literature on the self, one might question the motivations underlying behavior and the choice of coping strategies. Indeed, one can be motivated to protect the self and therefore use more protective strategies (e.g., self-handicapping, attribution to discrimination), or to enhance the self and therefore use more self-enhancing strategies (e.g., self or group affirmation, compensation, competition). In this respect, we can speculate that challenge appraisals may be linked to self-enhancement strategies whereas threat appraisals might be linked to self-protective strategies. Taking into account those specific motivations, and according to the variable efficacy of strategies (e.g., relative inefficacy of self-handicapping vs. relative efficacy of self-affirmation to protect the self), this work constitutes one of the most important aspects to consider in future research on identity threat appraisals.

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