

# Toward a Psychological Typology of Stressful Situations

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The purpose of the study was to develop a typology of stress motives in everyday life that would be based on reversal theory and therefore transcend the sociological contexts usually considered (e.g., work stress, family stress, patriotic stress). It exploited the idea of a wide variety of possible types of discrepancies between desired states of mind (or desired levels of achievement) and current states of mind (or current levels of achievement) in order to make a typology of these motives, whether they correspond to so-called tension stress or so-called effort stress. A large sample of people of different ages was asked about what they considered to be stressful situations in their daily lives (e.g., when I feel I am unpopular, I get stressed). Factor analysis of their responses suggested a five-factor structure. These factors were labelled: Not getting it done (a telic type factor of motives), Being of a different opinion (a conformist-type factor), Not being able to object (a negativistic-type factor), Not being in control of the situation (an auto-centric mastery-type factor), and Not getting sympathy (an auto-centric sympathy-type factor).

*Keywords:* stress motives; psychological typology; reversal theory; France

The purpose of this article is to show that reversal theory can be used as a framework for an attempt to characterize the situations of everyday life that are perceived by people as likely to generate high levels of stress. In other words, it is to discover a typology of daily life motives for stress. The question asked is therefore: Is it possible to achieve a typology of motives to stress in everyday life that is based on a psychological theory and that, therefore, transcends the contexts usually considered (e.g., work stress, family stress, patriotic stress)?

From a very general point of view, that of evolution, we can put forward the idea that an evolved organism experiences stress every time its survival appears threatened: short-term survival (e.g., appearance of a powerful predator), medium-term survival (e.g., progressive depletion of local resources), or long-term survival (e.g., evidence of a warming climate). Opportunities for intense stress must have been extremely frequent at the dawn of our appearance on earth. Famines, bloody conflicts, predation, pandemics, accidents, enslavements were the lot of many of our ancestors (Pinker, 2011).

According to reversal theory (Apter, 1989, 2001, 2007, Svebak, 1993), stress results, in one of its forms – tension

stress, from the inability to experience (or to place oneself in) the state of mind that it is desirable to experience (or in which it is desirable to place oneself) given the circumstances:

$$\text{Stress} = f(\text{Desired State of Mind} - \text{Current State of Mind})$$

Stress can therefore result, for example, from the inability (impossibility) to maintain a telic state of mind in circumstances conducive to this low-arousal state of mind, i.e. involving mental concentration and effort. Possible stressors in this case would be noise, heat, fatigue, intrusive (pleasant) thoughts, or even illness (e.g., impossible to continue working fruitfully this afternoon in this heat). To return to the previous point, we can metaphorically associate this type of stress with the perceived inability to ensure the immediate means of our survival.

Conversely, stress can result from the inability (impossibility) to maintain, or manage to adopt, a paratelic state of mind in circumstances where this state of mind implies that a high level of arousal, i.e. involving pleasure and entertainment, would be appropriate. Possible stressors would be too much fatigue, intrusive (serious) thoughts, unwanted presence, poor choice of location (at the office) (e.g., can't continue to relax here, with that guy over there that I can't stand). Metaphorically, this type of stress can be associated with the perception of an inability to regain strength to face future dangers.

Similarly, stress can result from the inability to maintain a conformist state of mind in circumstances implying that state of mind, i.e., requiring, for example, respect for rules and

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Table 1  
*Examples of items that may fit into each category of RT*

Domain	State	Characteristic	Item
Goals and Means	Telic	Focusing on goals and achievement with a serious attitude	When I encounter unexpected difficulties at work or in something similar, I get stressed
	Paratelic	Focusing on the activity itself and on present moment with a playful attitude	When the funny side of a situation escapes me completely, I get stressed
Rules and Constraints	Conformist	Following social codes, rules and laws; showing respect or obedience; adopting a conventional attitude	When I have the idea to rebel when the situation would require to comply with orders, I get stressed
	Negativistic	Opposing social expectations and rules; expressing hostility or dissidence; adopting an unconventional attitude	When I feel like conforming when the situation would rather call for firm opposition, I get stressed
Transactional	Mastery	Trying to dominate people, things or situations	When I don't feel good in my role as group leader, I get stressed
	Sympathy	Feeling affection toward other people or things	When I'm the only one who thinks that we should be wary of certain people when everyone else seems to want to sympathize with them, I get stressed
Relations	Autocentric	Being the focus of other's concerns and interests	When no one pays attention to me, I get stressed
	Intra-Autic	Focusing on one's own concerns and interests	When I lose confidence in myself in a given situation, I get stressed
	Allocentric	Identifying with and focusing on others' needs and interests	When I feel like thinking about my personal interests when the situation requires me to think about others, I get stressed
	Pro-Autic	Living through (usually) powerful or sympathetic others	<i>When I realize that the leaders of my religion are criticized, I stress</i>

traditions. Possible stressors would be unfamiliarity with the protocol, cultural change, disagreement with the norms (e.g., impossible not to start laughing when faced with all these strange rituals). This type of stress could be associated with a perceived inability to be consistent with the group, which is supposed to protect against the vagaries of life. And so on. When this type of inability is chronic, it usually falls under the broad umbrella of mental disorders.

According to reversal theory, there is another form of stress called effort stress. In this case, stress is associated with the effort to get closer to a goal or to succeed in getting into a certain state of mind (e.g., I only have two days left and I haven't revised the last three classes yet; I absolutely have to stop playing and get serious). Effort stress would be an attempt to reduce tension stress. Prolonged effort stress can lead to somatic problems.

In both cases – tension stress and effort stress, there is the idea that stress is associated with a gap: a gap between a goal and a current level of achievement, a gap between the demands of a situation and the behaviors that can currently be envisaged, or a gap between the idea that one has of oneself and the opinion expressed by others. In this spirit, Svebak (1993) developed a reversal theory instrument for measuring both telic and paratelic tension and effort stress: The Tension and Effort Stress Inventory (TESI, see also Legrand, 2002).

The present study exploited the idea of a great diversity of possible types of discrepancies between desired states of mind (desired levels of success) and current states of mind (current levels of success) in order to carry out a typology of the motives for stress – whether these correspond to what is called tension stress or what is called effort stress. To do this, first we questioned a group of people of various ages on what they consider to be the most stressful situations in their daily lives. We then sought to identify common themes. Our research question was: Is it possible to interpret these common themes in terms of the categories postulated by reversal theory? Does it make sense to talk about stress of a telic type? stress of a conformist type? stress of a mastery type? And so on.

In particular, we expected to identify a particular type of stress motive that evokes the telic category. Indeed, work stress has been the common background of many, many studies in this area, which were recently reviewed by Dewe & Cooper (2021). Various self-help books have been published (e.g., Martin, 2014). Feeling like you can't do it despite your best efforts is, whether at work or in the family or elsewhere, a recurring theme in daily life conversations. In fact, this type of situation was the most frequently mentioned in participants' spontaneous statements.

We also expected to find a type of stress motive evoking the (combined) auto-centric sympathy category. Finding yourself living in a place, where no one is paying attention to you and where you fail to sympathize is, indeed, a stressful situation that has been extensively studied by, for example, authors interested in migration (e.g., Moussaoui et al., 2021).

We expected, thirdly, to highlight a type of stress motive evoking the negativist category. Not being able to say no when one disapproves of what is happening is usually said to be highly stressful (e.g., Dallaire, 2004).

## Method

### Participants

The participants were 917 people (54% women) aged 18 to 85 years ( $M = 34.08$ ,  $SD = 21.31$ ). They lived in the city of Toulouse and its suburbs. Among those who agreed to indicate their marital status, 31% were single, 46% were married, 14% were cohabitants, 4% were divorced, and 5% were widowed.

### Material

A questionnaire of 115 items was composed. Each item was of the type: When I have to act in a way that I disapprove of for moral reasons, I get stressed. These items were created from the spontaneous responses of the group of people interviewed prior to the study about what makes them most stressed in their daily lives (e.g., last week I was very stressed the day my work was evaluated by my supervisor).

Additional items were then created by the experimenters, based directly on reversal theory. In particular, we ensured that each category of mental state postulated by the theory corresponded to various potentially stressful situations (see Table 1). The items referring to beliefs and religions were, however, not included in the questionnaire in order to avoid placing some participants in an uncomfortable situation. The two ends of the response scale were Barely (0) and Enormously (10).

The Perceived Stress Scale (Cohen & Williamson, 1988; e.g., In the last month, how often have you felt nervous and stressed?) and the Appraisal of Life Events Scale (Ferguson, Matthews, & Cox, 1999; Indicate the extent to which each of the following adjectives (e.g., frightening) best describes your perceptions of the event) were also applied.

### Procedure

The participants were approached by three research assistants near shopping centers or administrative centers (e.g., the post offices) in the city of Toulouse and its surroundings. The purpose of the study was explained to them. When they agreed to participate (49% participation rate), the questionnaire was filled out in a quiet place in the neighborhood or an appointment was made to fill out the questionnaire later,

either at a university location or at the participant's home, at their convenience. Participants were presented with the stress motives questionnaire first and then with the other two questionnaires. As informed consent was obtained and strict anonymity was maintained, the study complied with the legislation in force in France and with the Declaration of Helsinki.

## Results

In order to identify the common themes sought, an exploratory factor analysis was conducted. This analysis suggested the existence of a five-factor structure. The first factor (factors I, II, and III are shown in Table 2) included situations that all refer to goals (especially work goals) that have been set by the individual or are inherent in the situation, goals that must be achieved (e.g., When I fail to learn something important, I got stressed). This stress motive factor was interpreted as the expected telic-type factor: Not Getting It Done. A mean score was calculated from the five items that loaded most the factor. Its value was the highest recorded in the study ( $M = 6.02$ ,  $SD = 2.26$ ). It was significantly ( $p < .05$ ) higher for women ( $r = .22$ ), for participants who reported, using the Perceived Stress Scale, having experienced more stressful situations in the past month ( $r = .35$ ), and for those who, through the Appraisal of Life Events Scale, described these situations more negatively (e.g., threatening) ( $r = .22$ ).

The second factor included situations in which a person's opinions are totally out of step with their social environment. This stress factor was interpreted as the conformist-type factor used as an example above: Being of a Different Opinion. The average score was notably lower ( $M = 3.49$ ,  $SD = 2.09$ ).

The third factor included conflict situations in which the person was unable to oppose decisions that they do not like (e.g., I must act in a way that I do not like for moral reasons). This stress motive factor was interpreted as the expected negativist-type factor: Not Being Able to Object. The mean score was higher than the preceding one ( $M = 4.77$ ,  $SD = 2.06$ ). It was significantly higher for older participants ( $r = .24$ ) and for participants who reported more stressful situations in the past month ( $r = .25$ ).

The fourth factor (factors IV and V are shown in Table 3) referred to situations in which the person fails to play a dominant role or at least to have his or her point of view taken into account. This type of stress motive factor was interpreted as an auto-centric mastery-type factor of motives: Not Being in Control of the Situation. The mean score was the lowest recorded in this study ( $M = 2.22$ ,  $SD = 1.66$ ).

The fifth factor, finally, referred to situations in which the person fails to attract sympathy from others. This type of stress motive factor was interpreted as the expected auto-centric sympathy-type factor: Not Getting Sympathy. The mean score was higher than in the preceding case ( $M = 4.40$ ,  $SD = 2.49$ ). It was significantly higher among younger peo-

Table 2  
 Main results of the exploratory factor analysis, factors I, II, & III

When ..., I get stressed: <i>Barely (0) – Enormously (10)</i>	Factor					<i>M</i>	<i>SD</i>
	I	II	III	IV	V		
... I feel like I can't reach a goal I've set for myself	.73	.11	.16	.15	.02	7.22	2.72
... I fail to learn something important	.72	.06	.21	.15	.05	6.98	2.97
... I encounter unexpected difficulties at work or in something similar	.71	.14	.06	.17	.10	6.74	2.92
... I don't know how to do things right	.71	.21	.18	.08	.11	6.51	2.73
... I feel like I won't be able to finish and turn in my work on time	.70	.20	.08	.07	-.03	7.63	2.98
... I lose confidence in myself in a given situation	.70	.09	.18	.18	-.08	7.43	2.96
... I feel that I can't produce something worthwhile	.69	.22	.16	.12	.03	6.92	2.7
... I don't know exactly what is expected of me	.67	.18	.18	.20	.09	6.47	2.86
... I feel like I can't stay calm in a situation where I have to think about something important	.66	.27	.18	.05	-.01	6.75	2.91
... I can't concentrate enough on my work	.65	.17	.16	.08	.18	6.24	2.97
... I feel that I am not progressing (or no longer progressing) in a given situation	.65	.16	.08	.21	.10	6.68	2.68
... I can't organize my activities	.63	.08	.23	.08	.14	6.29	3.02
... I don't feel brave enough to take on certain undertakings that are of primary importance to me	.57	.08	.34	.18	.04	6.75	2.83
... I am not able to anticipate what is going to happen	.57	.19	.13	.10	.17	5.76	2.89
... I feel tense when I have to accomplish a task that requires a certain precision, a certain care	.56	.10	.32	.10	-.04	6.82	2.72
... I risk appearing weak in my own eyes	.56	.14	.16	.18	.11	6.48	3.04
... I don't feel good in my role as group leader	.54	.16	.35	.07	-.02	6.25	3.02
... I don't have enough resources to do something important to me	.51	.12	.28	.24	.12	6.35	2.93
... I feel that I am in danger of losing my personal control	.51	.34	.23	.05	-.08	6.49	2.93
... I'm the only one who finds the claims of others to be justified while everyone else rejects them	.14	.71	.26	.02	.12	4.68	2.68
... I find something unfounded that is normally respected by all	.18	.70	.09	.15	.14	4.4	2.54
... I am the only one who finds something normal that should not be conformed to	.19	.68	.20	.11	.11	4.55	2.6
... I find something uninteresting that is normally very important	.22	.67	.07	.16	.15	4.36	2.52
... I find something very exciting that for others is very boring	.09	.64	.05	.16	.28	3.78	2.49
... I'm the only one who finds something abnormal to which one must absolutely conform	.21	.64	.22	.07	.10	5.05	2.91
... I'm the only one who finds something amusing that we absolutely must find serious	.17	.63	.00	.19	.27	4.05	2.69
... I'm the only one who finds something boring that everyone else finds fun	.09	.62	.11	.19	.27	3.94	2.69
... I'm the only one who thinks that we should be wary of certain people when everyone else seems to want to sympathize with them	.21	.60	.21	.20	-.03	5.63	2.94
... the funny side of a situation imposes itself on me entirely while this situation must be considered seriously	.20	.58	.03	.11	.32	3.91	2.41
... I am the only one thinking about other people's interests while everyone else seems to be thinking about their own	.11	.58	.29	.09	.02	4.97	2.99
... I am the only one who wants to understand the point of view of others while everyone else seems indifferent to it	.24	.57	.29	-.03	.11	5.01	2.78
... the funny side of a situation escapes me completely	.14	.50	.07	.24	.31	3.94	2.51
... I have the idea to rebel when the situation would require to comply with orders	.28	.49	.25	.15	-.02	5.54	2.86
... I have to act in a way that I don't like for moral reasons	.27	.16	.71	.00	-.13	6.67	3.02
... I have to do something I don't agree with	.31	.14	.71	.00	-.04	6.95	2.88
... I find myself in a situation where I can't think freely (i.e. think for myself)	.25	.14	.59	.12	.02	6.28	2.93
... I feel uncomfortable with the rules or guidelines I have to follow	.40	.20	.59	.04	.05	6.1	2.8
... I feel like thinking about taking advantage of someone else when the situation requires me to try to help them	.16	.18	.59	.05	.14	4.62	2.79
... there is really no warmth in the group	.08	.09	.58	.19	.16	4.18	2.55
... I feel like conforming when the situation would rather call for firm opposition	.15	.21	.56	.04	.18	4.79	2.64
... I have to go back on promises I made	.36	.09	.55	.02	-.07	7.19	2.96
... I feel like I'm unpopular	.05	.10	.55	.27	.18	4.76	2.87
... I feel like thinking about my personal interests when the situation requires me to think about others	.14	.16	.54	.03	.23	4.57	2.72
... there is no way to be spontaneous	.28	.11	.54	.11	.04	5.85	2.98
... I can't trust the people I'm with	.40	.18	.52	.15	.08	6.31	2.98

Table 3  
Main results of the exploratory factor analysis, factors IV, & V

When . . . , I get stressed: <i>Barely (0) – Enormously (10)</i>	Factor					<i>M</i>	<i>SD</i>
	I	II	III	IV	V		
. . . no one pays attention to me	.18	.14	.06	.83	.15	5.31	3.13
. . . no one asks me for my opinion or advice	.22	.21	.08	.77	.17	5.08	2.92
. . . no one wants to collaborate with me	.29	.20	.12	.72	.01	5.97	3.09
. . . no one appreciates my sense of humor	.19	.28	.06	.63	.14	4.99	3.09
. . . I can't get people around me to like me	.28	.15	.33	.61	.10	5.65	3.03
. . . I feel that I am annoying others	.37	.24	.23	.47	-.04	6.11	3.07
. . . I don't see the possibility of having a little fun	.25	.15	.09	.41	.25	4.88	2.84
. . . the situation does not present any particular challenge	.05	.25	.05	.01	.83	2.86	2.27
. . . I find something very sensible that others find baseless	.05	.25	.05	.01	.83	4.47	2.65
. . . there is no one I can really compete with	.01	.15	.18	.05	.61	2.82	2.33
. . . I don't get any personal benefit from a situation	.13	.22	.04	.24	.56	3.03	2.21
. . . I am not the leader of the group	.02	.15	.12	.25	.55	2.83	2.26
. . . I'm not able to make an impact on others	.27	.24	.13	.35	.43	4.54	2.59
Explained Variance	9.62	6.76	5.73	4.06	3.57		
Percent Explained	.17	.12	.10	.07	.06		
Cronbach Alpha (Five Items)	.85	.86	.78	.88	.76		
% Ratings > 5	69	50	42	26	8		

ple ( $r = -.18$ ) and among participants who reported more stressful situations in the past month ( $r = .26$ ).

### Discussion

Overall, this study revealed five separable types of stress motives: telic-type motives (strongly recognized as such by 69% of the participants), negativistic-type motives (50%), auto-centric sympathy-type motives (42%), conformist-type motives (26%), and auto-centric mastery-type motives (8%). These results are consistent with the proposition that reversal theory can be a useful tool when it comes to inventorying the types of stressful situations in a way that is independent of the usual contexts: work stress, driving stress, stress in the couple's life, sports competition stress, or stress related to isolation. Let us emphasize that the basis of such an inventory is strictly psychological. A telic-type stress motive can, for example, be observed at work but also in many situations where objectives, which might seem trivial on the surface, are taken very seriously by the people who live the situation (e.g., making a model of the Titanic).

The reasons why only five types of stressful situations were identified may be due to the sample of daily life situations considered in the questionnaire. As mentioned above, motives involving belief and religion were, for example, deliberately excluded. Situations in which the person is suffering, experiencing pain, or is led to consider that his or her life is in danger were also not mentioned.

Also, certain motives for stress, such as paratelic-type motives or alloic-type motives, may not have been viewed as reasons for stress in the same way as the others. It is possi-

ble that, for people, such situations are not labeled as stressful but are given another name, such as situations of deep boredom (not being able to entertain oneself) or situations of immoral behavior (not being able to decide to help others in need). They therefore do not appear in our inventory because they are not typically seen as stressful but evoke other types of emotions.

Finally, the way the items were constructed, i.e., stating a (sometimes complex) clause (e.g., when I feel tense when I have to perform a task that requires a certain amount of precision...) and then asking for a rating in terms of agreement, was not necessarily the best way to fully capture certain types of stress motives.

If we return to the considerations developed above, concerning the direct relationship between the experience of stress and the perception of the endangerment of our survival, we find that the inability to acquire, metaphorically, the means to guarantee our survival – the inability to achieve certain goals – is the dominant type of stressful situation. It is closely followed by the perceived inability to oppose; that is, the inability to safeguard our integrity. Then comes the perceived inability to acquire group resources and the perceived difficulty to be one with the group. In such a perspective, it is not surprising that the perceived inability to place oneself in a relaxation situation did not give rise to the emergence of a specific stressor (technically, a factor). Nowadays, there is no shortage of opportunities to have fun and, in the process, regain one's strength.

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