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FOSTERING EMOTIONAL ATTUNEMENT: OPTIMISTIC SHAPING OF EMOTIONAL EXPERIENCES

Dispositional optimism can be viewed as a powerful emotional engine that both affects the management of positive and negative emotions and enhances emotional attunement. After bridging core features of the dispositional optimism construct with theorizing and research on emotional coping and emotion regulation, the pathways through which optimism shapes the emotional experience will be outlined, focusing on major implications for interpersonal communication. Finally, empirical evidence regarding optimists' and pessimists' narratives of their emotional experiences will be discussed, corroborating literature findings regarding emotion regulation strategies that shape optimists' sharing and communication of emotions.

Keywords: optimism, emotion regulation, emotional attunement, emotional sharing.

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1. Emotional Pathways from Optimism to Subjective Well-being

As a scientific construct, optimism cannot be considered a clear-cut construct, having been conceptualized and measured in different ways (Carver & Scheier 2002). At present, the well-known approaches to optimism as an individual difference include lines of research into dispositional optimism (Scheier & Carver 1985; Scheier & Carver 1992) and explanatory style (Peterson & Seligman 1984; Seligman 1991). A large body of evidence stemming from these approaches has highlighted that optimism is related to several beneficial outcomes related to subjective well-being (Scheier, Carver & Bridges 2002; Peterson & Steen 2002) and physical health (Peterson & Bossio 2002). Each of these approaches has generated its own research programme that sheds light on the processes that, at different levels (i.e., cognitive, emotional, etc.) link optimism with these outcomes. As stated in the aims and applications of positive psychology (Seligman 2003), research into mechanisms that foster human flourishing both in an hedonic and in a eudaimonic perspective is indeed pivotal within this emerging domain of psychology. In the present paper, we focus on optimism as operationalized in terms of self-reported generalized expectancies (Scheier & Carver 1985; Armor & Taylor 1998) and, in discussing how dispositional optimism works, attention is devoted, by design, to its influence on the shaping of emotional experiences, along the timeline of the emotion generative process.

1.1. Optimists' Dealing with Adversities: Emotional Coping Resources

Rooting within expectancy-value models on motivation, the construct of dispositional optimism is defined as a generalized form of positive vs. negative expectancies, that is, a sense of confidence vs. doubt about the goal's attainability (or the anti-goal's avoidability). In this self-regulatory model of behaviour, positive expectancies lead to increased effort to attain desired outcomes or goals, whereas negative expectancies lead to disengagement and eventually giving up and turning away from goal pursuit (Carver & Scheier 2002). For this reason, optimism has been found to predict engagement and exerting continuous effort across multiple contexts ranging from normative events to extreme traumas (Aspin-

wall & Taylor 1992). Optimists' characteristic approach orientation in facing adversities has been paralleled, from the earliest empirical evidence of its effect, to the frequent use of active and engaged coping strategies, in which the goal is to reduce, or even eliminate, and, in any case, manage the internal or external demands of a stressor (Scheier & Carver 1985). A number of studies further established that optimists' reporting less distress in facing stressful situations, serious disease, and specific health threats can, at a considerable stretch, be explained by definite stable and situation-specific coping responses (Scheier, Carver & Bridges 2002; Solber Nes & Segerstrom 2006). Emotional coping strategies were therefore conceived as mediators in the relation between optimism and subjective well-being. Drawing on the conceptual framework of the *stress and coping model* (Lazarus & Folkman 1984), findings from these researches suggest that optimists routinely resort, more than pessimists, to problem-focused, active and planful coping, turning to positive reframing if the situation is perceived as uncontrollable. In studies of proactive processes, optimists were also found to attend vigilantly to risks, when perceived as applicable to them and related to potentially serious health problems (Aspinwall & Brunhart 1996). Besides just reacting to adversity, optimists were therefore found to take constructive steps to safeguard their health and well-being.

Thus far, the picture that emerges is that optimists report better adjustment to a wide range of stressors because they cope actively instead of avoidantly. However, the benefits of optimism go far beyond the management of life stressors and transitions amenable to improvement through one's efforts. In the case of uncontrollable situations (i.e. diagnosis of life-threatening illness) optimists were reported to turn, more frequently than pessimists, to emotion-focused strategies like positive reframing and benefit-finding (trying to find a 'silver lining' within adversities; Tennen & Affleck 2002), instead of resorting to overt denial or suppression of thoughts. Acceptance and disengagement coping strategies relate to optimists' advantages in adjustment since acceptance, differently from resignation, implies a restructuring of the meaning of one's experience so as to come to grips with the reality of the situation that one faces. Acceptance thus involves an articulated set of appraisals through which the person actively works through the experience and attempts to

integrate it into an evolving perspective on valued goals that can realistically be attained (Scheier, Carver & Bridges 2002). In these cases optimistic beliefs heighten attention to negative information, lead to remember more about it and to greater elaborative processing. Such changes in optimists' favourable beliefs to be in line with the situation support an elaborate pattern of emotional coping responses that, though resulting in an overall positive balance of one's affect, can yield substantive negative emotional experiences along the evolving appraisal processes (Aspinwall, Richter & Hoffman 2002).

1.2. Optimistic Emotion Regulation Processes

The mediational role of emotion management with respect to diverse beneficial effects of optimism has recently been highlighted also within the emotion regulation framework (Gross & John 2003; John & Gross 2007). Within the broad category of affect regulation, emotion regulation processes are distinguished from emotional coping for: (a) taking into account the regulation of both positive and negative emotions (instead of focusing predominantly on decreasing negative affect, namely, "the regulation of distressing emotions and doing something to change for the better the problem causing the distress"; Folkman & Lazarus 1985: 152); (b) positing a continuum from conscious and effortful forms of emotion regulation to effortless and automatic ones (Mauss, Bunge & Gross 2007); (c) making no *a priori* assumptions as to whether any particular form of emotion regulation is adaptive or maladaptive; differently, in the stress and coping literature, coping strategies are assumed to be adaptive, thus heightening the danger of confounding since measures of coping can contain some of the variables – for example, distress or psychopathology – considered, at the same time, as the outcome measure of mental health (Lazarus 2000).

The process design of emotion regulation stems from a multicomponential conception of emotion (*modal model of emotion*; Gross & Thompson 2007) rooted in the study of a number of prior emotion scholars (Lazarus 1991; Scherer 1984). Within this view, the emotion-generative process begins with an evaluation of emotion cues. When attended to and appraised in certain ways, emotion cues trigger a coor-

minated set of response tendencies that involve experiential, behavioural, and physiological systems. Once these response tendencies arise, they may be modulated in various ways. Since emotion unfolds over time, emotion regulation strategies can be distinguished in terms of when they have their primary impact on the emotion-generative process, each phase of which constitutes a potential target for regulation. Along the timeline of the emotion process, *antecedent-focused strategies* refer to what individuals do before the emotion response tendencies have become fully activated and have changed their behaviour and peripheral responding. They involve: *situation selection* (the approaching or avoiding certain people, situation, or activities), *situation modification* (tailoring a situation so as to modify its emotional impact), *attention deployment* (used to pick which aspects of a situation to focus on), and *cognitive change* (the constructing of one of the many possible meanings which can be attached to particular aspects of the situation kept in focus). Differently, *response focused strategies* refer to the various modulation attempts to influence emotion response tendencies once they have been elicited.

According to theorizing and empirical evidence, optimism is related to the frequent use of cognitive reappraisal strategies (John & Gross 2007). Among the family of cognitive change strategies, *reappraisal* is a form of emotion regulation that involves construing a potentially emotion-eliciting situation in a way that changes its emotional impact. Gross & John (2003) showed that reappraisal is related to coping through interpretation, specifically, through looking for something good during stressful events. When in the service of the down-regulation of negative emotions, reappraisal was found to be associated with decreased activation in sub-cortical emotion-generative regions (such as the insula and amygdale), as well as increased activation in dorso-lateral and medial prefrontal regions associated with cognitive control (Ochsner et al. 2002). Moreover, engaging in reappraisal processes does not interfere with ongoing cognitive processes, as reported in experimental studies where use of reappraisal neither impaired incidental memory (Richards & Gross 2000) nor disrupted social interaction (Butler et al. 2003). Optimism has also been associated with *situation selection*, that involves taking actions that make it more (or less) likely

that individuals will end up in a situation expected to give rise to desirable (or undesirable) emotions. Situation selection requires the ability to mentally simulate the likely features of remote situations, and of expectable emotional responses to these features. This strategy requires an appropriate weighting between short-term benefits of emotion regulation versus longer-term costs, that often entails a complex cognitive scanning of the contingent features of the emotion-eliciting situation, including taking into account the perspective of others. Optimists' relying on situation selection therefore conceptually matches the strategic configuration of optimistic beliefs, conceived as bounded, continuously adjusted and used selectively, rather than indiscriminately, to be in line with realistic assessments of one's own capabilities and prospects (Armor & Taylor 1998). Finally, among response modulation strategies, optimists tend not to rely on *expressive suppression*: optimists' response modulation involves low suppression, more expression and sharing of emotions, with positive implications for accommodation and attunement in communication (John & Gross 2007).

2. Optimistic Promoting of Positive Emotions

Emotion regulation is so tightly intertwined with emotion generation that some theorists view emotion regulation as part and parcel of emotion (Campos, Frankel & Camras 2004). Supported by recent advances in neuroimaging, that have begun to assess whether there are differences either in the magnitude or regional locus of brain activation associated with emotion alone versus emotion in addition to emotion regulation (Ochsner et al. 2004), both common sense and its academic counterpart suggest the need to distinguish such processes, conceiving of varying types of emotion regulation that occur in parallel at multiple points in the emotion generative process.

Given these premises, optimists' relying on cognitive reappraisal strategies turns out to be a powerful device in fostering positive emotional experiences. Since reappraisal occurs early, and intervenes before emotion response tendencies have been fully generated, it can efficiently alter the entire subsequent emotion trajectory, deeply affecting the quality (which emotion) as well as the quantity (how much emotion)

of the subsequent emotional response (Gross 2008). In a similar vein, Folkman & Lazarus (1988) viewed coping as a mediator of emotion: after the appraisal process generates emotion, the appraisal and its attendant emotions influence coping processes. These processes, in turn, change the person-environment relationship, that is reappraised, thus leading to changes in emotion quality and intensity. Specifically, when used to down-regulate negative emotion, reappraisal can successfully reduce the experiential and behavioural components of negative emotion. Gross & John (2003) provided empirical evidence that reappraisers experience and express more positive emotion, and also experience and express less negative emotions than individuals who use reappraisal strategies less frequently. Optimists' positive emotional experiences also stem from benefit-finding strategies, that, among the family of cognitive regulation strategies, apply to negative events. The resulting generation of positive emotions works, in turn, as a powerful buffer against stress (Folkman & Moskowitz 2000). Finally, also infusing ordinary events with positive meaning (i. e., appreciating a compliment) can be considered another pathway to positive emotions in everyday life. As Folkman & Moskowitz (2000) found in their research on caregivers of people with AIDS, finding positive meaning in planned events (i.e., being thankful for friendship during a social gathering) or even more random events (i.e., appreciating a beautiful sunset) is linked to striking advantages in enhancing positive emotions. These cognitive change regulation strategies are in line with the process of savoring (Bryant & Veroff 2007), a cognitive form of emotion regulation that involves awareness of, and deliberate attention to, one's pleasant ordinary experiences. Although correlational in design, findings reported by Bryant (2003) show that optimism is related to savoring, and to the prolonging of the experience of positive emotions.

Altogether, this pattern of results matches speculation (Anolli & Realdon 2007) and empirical evidence (Wrosch & Scheier 2003; Danner, Snowdon & Friesen 2001) highlighting that optimists are more likely than pessimists to experience positive emotions. And they do so not because they are more cheerful, but because they routinely adopt regulation strategies that maintain and enhance positive emotions, besides reducing distress.

3. The Social Consequences of Reappraisal: Sharing of Emotional Experiences and Emotional Attunement

Besides increasing positive affect, reappraisal was found to relate positively to the sharing of emotions, both positive and negative (Gross & John 2003). The social sharing of emotion entails mutual intentionality in communicating an emotional episode involving the person who experienced it and the interlocutor (Rimé 2005). Social sharing usually develops in the period immediately following the emotional episode, in a communicative interaction in which the emotion-eliciting circumstances and related thoughts and feelings are talked about in a shared language.

Within this framework, optimists' regular use of reappraisal and participation in emotional sharing has been empirically found to benefit interpersonal functioning, with notable long-term cognitive and social effects (Gross & John 2003). These benefits can be related to the enhancement of interactants' participation in a sharing process where (a) the meaning of emotional experiences is cooperatively negotiated and defined; (b) interpersonal adaptation, quality of relationships, and emotional attunement are supported and fostered.

3.1. Emotional Sharing as Participation in Defining the Meaning of Emotional Experiences

The process of emotional sharing entails emotion lexicalization and conceptualization. Drawing on theories on embodied cognition (Barsalou 2008; Gallese & Lakoff 2005), using knowledge about emotions involves multimodal simulations rooted in a partial re-enactment of the same sensory-motor areas generally activated during actual emotional experiences. Emotion concepts, in this approach, can be conceived as *simulators* (Barsalou 2008) or *embodied simulations* (Gallese & Lakoff 2005) of an emotional experience that has been repeatedly attended to (Niedenthal 2008). Therefore, in such a view, emotion concepts are grounded in actual emotional states and, although they may not constitute full-blown emotions, they usually contain enough information about the original states to function as representations of them conceptually (Niedenthal 2008). Throughout emotional sharing processes, the labelling of emo-

tional experiences implies simulations that progressively define and articulate embodied knowledge on such experiences. Importantly, emotional sharing implies interactants' participation in such a process, so that the search for meaning gives way to mutual engagement in defining and conceptually organizing emotional experiences that are being shared. These processes therefore provide optimists with articulate pathways to the understanding of their emotional experiences and, consequently, with more comprehensive behavioral options.

3.2. Interpersonal Adaptation and Emotional Attunement

Besides relying on positive reappraisal regulation strategies, optimists were also found not to habitually resort to expressive suppression strategies, that lead to the inhibition of emotional expressions while emotionally aroused (Gross & John 2003). As documented by John & Gross (2004), reappraisal and expressive suppression strategies are independent regulatory strategies and have rather different consequences for social functioning.

On the one hand, regular use of reappraisal and concurrent sharing of positive emotional experiences lend optimists to view such experiences as opportunities on which to seize or capitalize, by making them more memorable to the self and by maximizing the event's significance. These conditions, in turn, support interlocutors in sharing them further and further. Langston (1994), in two different studies, provided empirical evidence of this *capitalization effect*, showing that communicating positive events to others was associated with an enhancement of positive affect far beyond the benefits due to the valence of the positive events themselves, and that involved both the speaker and the interlocutor. Along this line, recent theorizing and research into the context of couple and family communication patterns have highlighted that social sharing of positive emotions facilitates communicative interactions and enhances relationship well-being (Sexton & Schuster 2008). However, it should be noted that social sharing of emotions is not equivalent to directing emotion-expressing behaviour toward a social partner. Sharing negative emotions without directing them toward the partner has indeed been suggested as one of reasons for reappraisers' social success.

On the other hand, chronic use of expressive suppression, besides generating a decrease in the experience of positive emotions (while leaving intact that of negative ones) is a particularly disruptive form of emotion regulation, especially when communicative interactions are at issue.

Prior research has highlighted that responsiveness – the provision of appropriately contingent and locally pertinent responses – is a minimal requirement for coordination and for building intersubjectivity in communicative exchanges (Cappella 1997). According to Burgoon, Stern & Dillman (1995), when people communicate, they adapt their interaction styles to one another, adjusting their actions and behaviours to those of their partners therefore declining their communicative intentions through a set of flexible interactive behavioural patterns. Experimental research conducted with couples of unacquainted women showed that interpersonal attunement was seriously undermined by emotional expressive suppression since expressive suppression distracted regulators from the conversation, led to major decrements in their responsiveness, and produced heightened cardiovascular responding and perception of decreased rapport in their partners (Butler et al. 2003).

Taken altogether, these results show that optimists' pattern of adoption of specific regulatory strategies provides them with the opportunity of adapting to others, and of effectively negotiating their relationship with them, keeping in-tune with the ebb and flow of the communicative interaction (Butler et al. 2003). Moreover, since interactive processes involving emotional self-disclosure and responsiveness are a basic requirement for intimacy (Laurenceau, Barrett & Pietromonaco 1998), optimists' regulatory efforts pave the way for developing close relationships, upgrading the quality of longer term relationships, and fostering emotional attunement.

4. Optimistic and Pessimistic Narratives of Emotional Experiences: Empirical Evidence

An empirical study regarding optimistic and pessimistic narratives of their emotional experiences is sketched out, presenting and discussing preliminary results on optimistic emotion regulation, emotional lexicon, and emotional granularity. Implications for emotional attunement in communication are then outlined.

4.1. Aims and Hypotheses

The current study aimed at investigating how optimism as an individual difference shapes emotional experiences. The study was part of a more articulated research design regarding the optimism construct as a cognitive and emotional resource in facing adversities. Therefore research questions were focused on negative emotional experiences.

Particularly, we were interested in analysing differences between optimists and pessimists in their narratives of negative emotional experiences regarding: (a) the use of specific emotion regulation strategies, namely, situation selection, reappraisal and expressive suppression; (b) the use of positive and negative emotion words; (c) the degree of emotional granularity.

Regarding research question (a), theoretical speculation and research evidence within the emotion regulation perspective (Gross & John 2003; John & Gross 2007) supported the prediction that, within negative emotional experiences, (a1) the frequency of situation selection and reappraisal strategies will be higher in optimists' than in pessimists' narratives, while (a2) the frequency of expressive suppression strategies will be higher within pessimists' narratives than in optimists'.

As to positive and negative emotion words (research question b), our prediction was that, within negative emotional experiences (b1) optimists will not differ from pessimists in the frequency of use of negative emotion words. Following Chang (1998), optimists do not differ from pessimists in their primary appraisals of negative emotion cues. Rather, optimistic beliefs influence how emotional resources are shaped in managing distress and, more specifically, negative emotions (secondary appraisals). As Folkman & Moskowitz (2000) pointed out, secondary appraisals involving cognitive change strategies lead to infusing negative emotional experiences with positive meaning. Therefore, we predicted that (b2) within reported negative emotional experiences, the frequency of co-occurrences of positive and negative emotion words will be higher in optimists' narratives than in pessimists'. Finally, (b3) optimists were predicted to use more positive emotion words throughout their narratives.

Research question (c) relates to emotional granularity, that is, the ability to verbally characterize emotion experiences with precision (Barrett et al. 2001). Individuals who are emotionally granular use different emotion

words to represent qualitatively different experiences. Those lower in granularity manifest less variety in the use of emotion words, so that their emotion language represents experiences of emotion in a more undifferentiated fashion. Although no empirical evidence has been provided, to our knowledge, regarding variety of emotion labels within optimistic and pessimistic emotional lexicon, we speculated that optimists' routine use of reappraisal strategies and ensuing sharing of emotional experiences helped to inform them about the significance of the current situation, and to work out what, if anything, they should do next. Emotion knowledge activation through reappraisal processes would, within this perspective, show through lexical indexes of emotion differentiation. Therefore, we hypothesized that (c1) optimists' negative emotional lexicon will be more granular than pessimists'.

4.2. Method

4.2.1. Participants

Participants were 36 young adults, aged from 19 to 28 ($M=21.15$; $SD=2.18$) equally balanced for gender and optimistic disposition (assessed in a previous research session through the administration of the Life Orientation Test-Revised scale (Scheier, Carver & Bridges 1994; see Anolli [2005] for Italian norms of this scale). Participants scoring above the 70th percentile and below the 30th percentile were considered, respectively, as optimists and pessimists.

4.2.2. Procedure

Participants individually attended a briefing session in which they were invited to report their emotional experiences for at least 4 days (and for 12 days maximum) for 10 consecutive minutes each day on a white sheets diary provided by the experimenter. They were asked to focus mainly, though not exclusively, on their negative emotional experiences. They were told that both positive and negative emotional experiences are part of everyone's everyday experiences and were encouraged to think of the study as an unusual opportunity to learn more about themselves. They were asked to write at home, preferably at the end of the day. The same instructions were reported in written form on the back cover of the diary.

Both instructions and minimal duration (four days) and timing (ten minutes) of the writing task were drawn from Pennebaker's expressive writing paradigm (Pennebaker 2004). The investigator collected diaries from all participants about two weeks after the briefing session in an anonymous form (through a drop-down box at the laboratory).

4.2.3. Content Categories and Coding Procedure

In a preliminary stage two experts in emotion theorizing and research created a grid of categories relevant to the analyses encompassing: (a) two levels for *emotional experiences* (positive emotional experiences; negative emotional experiences). According to the foregoing modal model of emotion (Gross & Thompson 2007), text pieces encompassing relevant external or internal emotion cues, related appraisals, and an emotional response were identified as emotional experiences. When negative, but otherwise unspecified, affect responses (like stress responses), or mood states (more longlasting and diffuse than emotion, and sometimes unrelated to specific objects) were reported, they were not categorized as emotional experiences; (b) five levels for *emotion regulation strategies* (situation selection; situation modification; attention deployment; reappraisal; expressive suppression); (c) four levels for *positive emotion words* (adjectives; nouns; verbs; metaphors of positive emotions); (d) four levels for *negative emotion words* (adjectives; nouns; verbs; metaphors of negative emotions).

Given the nature of data and variables, *ATLAS.ti* software package was used (for a detailed description, see Muhr 2004). In particular, two instruments of *ATLAS.ti* were used: the *Hermeneutic Unit Editor* and the *Query Tool*. The first one is an organizational data structure which includes *primary documents*, that is, basic project components (in this case, optimists' and pessimists' narratives), *quotations*, that is, relevant pieces of text created during the process of coding (i.e., "sad," "cried," "I decided not to go there any longer") and *codes*, connected to quotations (i.e., "negative emotion adjective," "negative emotion verb," "situation selection"). If codes were part of categories, they were grouped into *families* (i.e., "negative emotion words," "emotion regulation strategies," etc.).

The *Query Tool* offered support for retrieving text pieces through combination of codes. In particular, it supported the construction of queries with proximity operators (*within*, *encloses*, *overlapped by*,

overlaps). The output of the *Query Tool* consisted in the number of occurrences of categorized terms that were considered as dependent variables for subsequent statistical analyses. For categories within emotion lexicon, both single words (i.e. the adjective *happy*) and longer textual segments (i.e. the metaphor *I saw red*) were considered as single occurrences of the related category.

The coding of the text was performed by two human researchers. Interrater reliability regarding the correct and consistent attribution of categories to the text was calculated on 100 % of written samples, yielding satisfactory results (Cohen's Kappa ranged from 0.69 to 0.77 through categories). Disagreements between coders were discussed and the resulting overall agreement, calculated on 20 % of written samples, averaged through categories, was very high (0.95).

4.3 Results

Thirty-six participants reported their emotional experiences for 4 to 12 days. Two GLM Univariate analyses were conducted to test differences between optimists and pessimists in *number of days of writing* and *total number of words of their narratives* (averaged per number of days of writing). Although no significant differences were found among groups for both these variables, only narratives of the first two days of writing and of the last two days of writing were retained for further analyses. This conservative approach was adopted following previous research highlighting that mood fluctuations in writing can affect the first two days of writing, becoming rapidly more stable in the following days (Pennebaker 2004). Moreover, since the narratives of four participants (two optimists and two pessimists) contained only unspecified valenced experiences that could not be categorized as emotional experiences, they were excluded from further analyses. GLM Univariate analyses with *total number of words of the narratives* (for the first and the last two days of writing) and *number of negative emotional experiences* reported as dependent variables and *optimism* as an independent factor were run again on the final sample ($n = 32$) showing no significant differences among groups.

As regards *emotion regulation strategies*, a GLM Multivariate analysis was used to test the prediction regarding the frequency of specific emotion

regulation strategies (situation selection, reappraisal, and expressive suppression) in optimists' and pessimists' narratives, yielding significant differences among groups ($F = 4,02$; $p = .020$; $p\eta^2 = .30$). Univariate analyses showed that optimists reported a significantly higher number of reappraisal strategies ($F = 7,64$; $p = .010$; $p\eta^2 = .20$), while no significant differences were found between groups for situation selection and expressive suppression strategies.

To answer the question whether optimists and pessimists differed in using *positive and negative emotion words* within negative emotional experiences, a GLM Univariate analysis was first conducted with number of negative emotion words as dependent variable. Optimists were not significantly different from pessimists under this respect. A further GLM Univariate analysis with number of co-occurrences of positive and negative emotion words within negative emotional experiences was conducted. Optimists were found to employ significantly more frequently than pessimists both positive and negative emotion words in their narratives of negative emotional experiences ($F = 4,84$; $p = .036$; $p\eta^2 = .14$). Finally, no significant differences were found in the number of positive emotion words used by optimists and pessimists throughout their narratives, regardless of the type of affect experiences reported.

To test the prediction about *degree of granularity* in the lexicon of negative emotions within negative emotional experiences, Type/Token Ratios (TTR) were calculated for each participant. The number of different discrete emotional categories used by each participant were considered as types (i.e., anger, sadness, shame) and the total number of negative emotion words within these categories were considered as tokens. A data-driven approach was used to identify the number of emotion categories employed by each participant, under the assumption that a definite number of basic emotion categories cannot *a priori* be identified. TTR ranged from .50 to .90 ($M = .71$, $SD = .14$) for optimists and from .31 to .81 for pessimists ($M = .60$, $SD = .13$). A GLM Univariate analysis with TTR for negative emotional lexicon as dependent variable was conducted yielding significant differences between groups ($F = 5.18$; $p = .031$; $p\eta^2 = .16$), showing a significantly higher differentiation in negative emotional lexicon for optimists than for pessimists.

4.4. Discussion and Conclusion

Although the data of the present study lend some support to our hypotheses and general line of argument, there are some caveats that need to be taken into account. First, empirical evidence reported in the literature regarding how optimism affects emotional processes has been supported, at least in part, by powerful research designs where variables of interest are manipulated directly. The approach taken in the current study relies on measuring optimism as an individual difference in reporting one's emotional experiences. Therefore, no causal claims or specific temporal ordering in the variables of interest are addressed. Nonetheless, the present study analyzes real-life experiences and provides an alternative approach to standard self-report methodologies. Second, coding and analyses of the narratives were performed covering only four days of writing, providing data that have been explored through a quantitative approach. A complementary qualitative approach, on a limited number of narratives, could have served the aim of addressing more articulated research questions analyzing both positive and negative emotional experiences more in detail.

Notwithstanding these caveats, the present findings are worth of being deepened. As regards emotion regulation strategies, predictions about specific types of regulation processes reported by optimists vs. pessimists were only partially confirmed. Only reappraisal strategies were reported significantly more frequently within optimists' narratives, while the same was not confirmed for situation selection strategies. Optimists' and pessimists' narratives of negative emotional experiences didn't also significantly differ as to reported expressive suppression strategies. Matsumoto, Yoo & Nakagawa (2008) empirically established that both situation selection and expressive suppression can serve beneficial social outcomes, such as interrupting negative emotion escalation, or increasing interpersonal distance when such distance is desirable. Therefore, while the habitual use of positive reappraisal has been mainly related to beneficial outcomes at different levels, situation selection and expressive suppression strategies can yield different adjustment outcomes depending on the local management of a specific situation, especially when relationship definition is at issue. Altogether, this pattern of results supports well-grounded research evidence showing that optimists more often than pessimists resort to reap-

praisal strategies. At the same time, it suggests that optimists' emotional competence in regulating emotions does not rely on the standard use of fixed types of regulatory strategies. As Gross & Thompson (2007) point out, what we do to regulate our emotions often involves multiple regulatory processes. A notable yet unanswered research question therefore concerns how different forms of emotion regulation typically co-occur and how optimism as an individual difference shapes these patterns.

The adoption of more or less complex patterns of emotion regulation is related, at least in adults, to knowledge about emotions. Barrett et al. (2001) empirically showed that individuals with greater ability to differentiate between negative emotions reported a wider range of effective regulation strategies, and could use them flexibly and consistently. Although empirical evidence related to this issue has so far been collected through experience-sampling methodologies, the current study provided preliminary empirical evidence that optimists label their negative emotions in a significantly more articulated fashion – that is, are more emotionally granular – than pessimists. Such a finer grained labelling of negative emotions can be considered a distinctive feature of optimistic emotional competence, that, together with reappraisal strategies, can modulate the trajectory of their emotional experiences.

Varied and flexibly patterned as they may be, at the core of optimistic emotion regulation strategies lie cognitive reappraisal, typically used in the down-regulation of negative emotions. To this respect, no significant differences were found between optimists and pessimists in the number of negative emotion words within negative emotional experiences. Notably, although optimists didn't significantly differ from pessimists also in the frequency of use of positive emotion words, the co-occurrences of both positive and negative emotion words within negative emotional episodes were significantly higher for optimists than for pessimists. This finding corroborates previous research highlighting that the search for positive meaning within negative emotional experiences is a major pathway through which optimism shapes negative emotional experiences.

Altogether, literature research evidence and findings from the present study show that dispositional optimistic beliefs affect emotional experiences in a variety of ways, with notable implications for emotional attunement. In particular, the routine adoption of reappraisal strategies

and concurrent emotional sharing, on the one hand, and the ability to verbally label negative emotions in a differentiated fashion, on the other hand, constitute basic requirements for ensuing interpersonal adaptation and emotional attunement. Although much of the empirical work on the optimistic shaping of positive emotional experiences has yet to be done, speculation and research evidence so far presented highlight how dispositional optimism works as a multifaceted resource in building emotional competence. And the distinctive feature of this competence lies not so much in activating specific expressive and behavioural options, but, rather, in providing a flexible set of options to be arranged locally in order to meet contingent individual and interpersonal attunement demands.

References

- ANOLLI, L. (2005). *L'ottimismo [Optimism]*. Bologna: Il Mulino.
- ANOLLI, L. & REALDON, O. (2007). Ottimismo e competenza emotiva [Optimism and emotional competence]. In: A. DELLE FAVE (ed.). *La condivisione del benessere. Il contributo della psicologia positiva*. Milano: Angeli: 8–29.
- ARMOR, D.A. & TAYLOR, S.E. (1998). Situated Optimism: Specific Outcome Expectancies and Self-regulation. In: M. ZANNA (ed.). *Advances in Experimental Social Psychology*. San Diego, CA: Academic Press: Vol. 30: 309–379.
- ASPINWALL, L. & BRUNHART, S.M. (1996). Distinguishing Optimism from Denial. Optimistic Beliefs Predict Attention to Health Threats. *Personality and Social Psychology Bulletin* 22: 993–1003.
- ASPINWALL, L.G. & TAYLOR, S.E. (1992). Modelling Cognitive Adaptation: A Longitudinal Investigation of the Impact of Individual Differences and Coping on College Adjustment and Performance. *Journal of Personality and Social Psychology* 63: 989–1003.
- ASPINWALL, L.G.; RICHTER, L. & HOFFMAN, R.R. (2002). Understanding how Optimism Works: An Examination of Optimists' Adaptive Moderation of Belief and Behaviour. In: E.C. CHANG (ed.). *Optimism and Pessimism: Implications for Theory, Research, and Practice*. Washington DC: American Psychological Association: 217–238.
- BARRETT, L.F. et al. (2001). Knowing what you are feeling and what to do about it: Mapping the Relation between Emotion Differentiation and Emotion Regulation. *Cognition and Emotion* 15: 713–724.
- BARSALOU, L.W. (2008). Grounded Cognition. *Annual Review of Psychology* 59: 617–645.
- BRYANT, F.B. (2003). Savoring Beliefs Inventory (SBI): A Scale for Measuring Beliefs about Savoring. *Journal of Mental Health* 12: 175–196.
- BRYANT, F.B. & VEROFF, J. (2007). *Savoring. A New Model of Positive Experience*. Mahwah, NJ: Lawrence Erlbaum.

- BURGOON, J.K.; STERN, L.A. & DILLMAN, L. (1995). *Interpersonal Adaptation: Dyadic Interaction Patterns*. New York: Cambridge University Press.
- BUTLER, E.A. et al. (2003). The Social Consequences of Expressive Suppression. *Emotion* 3: 48–67.
- CAMPOS, J.J.; FRANKEL, C.B. & CAMRAS, L. (2004). On the Nature of Emotion Regulation. *Child Development* 75: 377–394.
- CAPPELLA, J.N. (1997). Behavioral and Judged Coordination in Adult Informal Social Interactions: Vocal and Kinesic Indicators. *Journal of Personality and Social Psychology* 72: 119–131.
- CARVER, C.S. & SCHEIER, M.F. (2002). Optimism. In: C.R. SNYDER & S.J. LOPEZ (eds.). *Handbook of Positive Psychology*. New York: Oxford University Press: 231–243.
- CHANG E.C. (1998). Dispositional Optimism and Primary and Secondary Appraisal of a Stressor: Controlling for Confounding Influences and Relations to Coping and Psychological and Physical Adjustment. *Journal of Personality and Social Psychology* 74: 1109–1120.
- DANNER, D.D.; SNOWDON, D.A. & FRIESEN, W.V. (2001). Positive Emotions in Early Life and Longevity: Findings from the Nun Study. *Personality Processes and Individual Differences* 80: 804–813.
- FOLKMAN, S. & LAZARUS, R.S. (1985). If it changes it must be a process: Study of Emotion and Coping during Three Stages of a College Examination. *Journal of Personality and Social Psychology* 48: 150–170.
- FOLKMAN, S. & LAZARUS, R.S. (1988). Coping as a Mediator of Emotion. *Journal of Personality and Social Psychology* 54: 466–475.
- FOLKMAN, S. & MOSKOWITZ, J.T. (2000). Positive Affect and the Other Side of Coping. *American Psychologist* 55: 647–654.
- GALLESE, V. & LAKOFF, G. (2005). The Brain's Concepts: The Role of the Sensory-motor System in Reason and Language. *Cognitive Neuropsychology* 22: 455–479.
- GROSS, J.J. (2008). Emotion Regulation. In: M. LEWIS, J.M. HAVILAND-JONES & L.F. BARRETT (eds.). *Handbook of Emotions* (3rd ed.). New York, NY: Guilford: 497–512.
- GROSS, J.J. & JOHN, O.P. (2003). Individual Differences in Two Emotion Regulation Processes: Implications for Affect, Relationships, and Well-being. *Journal of Personality and Social Psychology* 85: 348–362.
- GROSS, J.J. & THOMPSON, R.A. (2007). Emotion Regulation: Conceptual Foundations. In: J.J. GROSS (ed.). *Handbook of Emotion Regulation*. New York: The Guilford Press: 3–24.
- JOHN, O.P. & GROSS, J.J. (2004). Healthy and Unhealthy Emotion Regulation: Personality Processes, Individual Differences, and Life Span Development. *Journal of Personality* 72: 1301–1333.
- JOHN, O.P. & GROSS, J.J. (2007). Individual Differences in Emotion Regulation. In: J.J. GROSS (ed.). *Handbook of Emotion Regulation*. New York: The Guilford Press: 351–372.

- LANGSTON, C.A. (1994). Capitalizing on and Coping with Daily-life Events: Expressive Responses to Positive Events. *Journal of Personality and Social Psychology* 67: 1112–1125.
- LAURENCEAU, J.; BARRETT, L.F. & PIETROMONACO, P.R. (1998). Intimacy as an Interpersonal Process: The Importance of Self-disclosure and Partner Disclosure, and Perceived Partner Responsiveness in Interpersonal Exchanges. *Journal of Personality and Social Psychology* 74: 1238–1251.
- LAZARUS, R.S. (1991). *Emotion and Adaptation*. Oxford: Oxford University Press.
- LAZARUS, R.S. (2000). Toward Better Research on Stress and Coping. *American Psychologist* 55: 665–673.
- LAZARUS, R.S. & FOLKMAN, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.
- MATSUMOTO, D. et al. (2008). Culture, Emotion Regulation, and Adjustment. *Journal of Personality and Social Psychology* 94: 925–937.
- MAUSS, I.B.; BUNGE, S.A. & GROSS, J.J. (2007). Automatic Emotion Regulation. *Social and Personality Psychology Compass* 1: 146–167.
- MUHR, T. (2004). *ATLAS.ti V5.0 User's Guide and References*. Berlin: Scientific Software Development. Last retrieved on November, 2009, from <http://www.atlasti.com/downloads/atlman.pdf>.
- NIEDENTHAL, P.M. (2008). Emotion Concepts. In: M. LEWIS, J.M. HAVILAND-JONES & L.F. BARRETT (eds.). *Handbook of Emotions* (3rd ed). New York: Guilford: 587–600.
- OCHSNER, K.N. et al. (2002). Rethinking Feelings: An fMRI Study of the Cognitive Regulation of Emotion. *Journal of Cognitive Neuroscience* 14: 1215–1229.
- OCHSNER, K.N. et al. (2004). For Better or for Worse: Neural Systems Supporting the Cognitive Down- and Up-regulation of Negative Emotion. *NeuroImage* 23: 483–499.
- PENNEBAKER, J.W. (2004). *Writing to Heal: A Guided Journal for Recovering from Trauma and Emotional Upheaval*. Oakland, CA: New Harbinger Publications.
- PETERSON, C. & BOSSIO, L.M. (2002). Optimism and Physical Well-being. In: E.C. CHANG (ed.). *Optimism & Pessimism. Implications for Theory, Research, and Practice*. Washington: American Psychological Association: 127–146.
- PETERSON, C. & SELIGMAN, M.E.P. (1984). Causal Explanations as a Risk Factor for Depression: Theory and Evidence. *Psychological Review* 91: 347–374.
- PETERSON, C. & STEEN, T.A. (2002). Optimistic Explanatory Style. In: C.R. SNYDER & S. LOPEZ (eds.). *Handbook of Positive Psychology*. New York: Oxford University Press: 244–256.
- RICHARDS, J.M. & GROSS, J.J. (2000). Emotion Regulation and Memory: The Cognitive Costs of Keeping One's Cool. *Journal of Personality and Social Psychology* 79: 410–424.
- RIMÉ, B. (2005). *La partage sociale des émotions [The Social Sharing of Emotions]*. Paris: PUF.

- SCHEIER, M.F. & CARVER, C.S. (1985). Optimism, Coping, and Health: Assessment and Implications of Generalized Outcome Expectancies. *Health Psychology* 4: 219–247.
- SCHEIER, M.F. & CARVER, C.S. (1992). Effects of Optimism on Psychological and Physical Well-being: Theoretical Overview and Empirical Update. *Cognitive Therapy and Research* 16: 201–228.
- SCHEIER, M.F.; CARVER, C.S. & BRIDGES, M.W. (1994). Distinguishing Optimism from Neuroticism (and Trait-Anxiety, Self-Mastery, and Self-Esteem): A Reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology* 67: 1063–1078.
- SCHEIER, M.F.; CARVER, C.S. & BRIDGES, M.W. (2002). Optimism, Pessimism, and Psychological Well-being. In: E.C. CHANG (ed.). *Optimism & Pessimism. Implications for Theory, Research, and Practice*. Washington: American Psychological Association: 189–216.
- SCHERER, K.R. (1984). On the Nature and Function of Emotion: A Component Process Approach. In: K.R. SCHERER & P. EKMAN (eds.). *Approaches to Emotion*. New York: Erlbaum: 293–317.
- SELIGMAN, M.E.P. (1991). *Learned Optimism*. New York: Knopf.
- SELIGMAN, M.E.P. (2003). Foreword: The Past and Future of Positive Psychology. In: C.L.M. KEYES & J. HAIDT (eds.). *Flourishing. Positive Psychology and the Life Well-lived*. Washington: American Psychological Association: xi–xx.
- SEXTON, T.L. & SCHUSTER, R.A. (2008). The Role of Positive Emotion in the Therapeutic Process of Family Therapy. *Journal of Psychotherapy Integration* 18: 233–247.
- SOLBERG NES, L. & SEGERSTROM, S.C. (2006). Dispositional Optimism and Coping: A Meta-analytic Review. *Personality and Social Psychology Review* 10: 235–251.
- TENNEN, H. & AFFLECK, G. (2002). Benefit-finding and Benefit-reminding. In: C.R. SNYDER & S.J. LOPEZ (eds.). *Handbook of Positive Psychology*. New York: Oxford University Press: 584–597.
- WROSCH, C. & SCHEIER, M.F. (2003). Personality and Quality of Life: The Importance of Optimism and Goal Adjustment. *Quality of Life Research* 12: 59–72.

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