Affectively Motivated: Affective Profiles, Motivation, Stress and Energy

Lillemor Adrianson[1], Clara Amato[2], Kristian Molander-Söderholm[2], Max Rapp-Ricciardi[3], Trevor Archer[3], Danilo Garcia[2, 3, 4*]

Abstract

Objective: We used the affective profiles model to investigate individual differences in motivation, stress and energy. The aim was to replicate past findings, but we also focused on matched comparisons within individuals with affective profiles that are similar in one affective dimension and differ in the other in order to predict changes when individuals increase/decrease their experience of positive or negative affect.

Methods: A total of 567 participants answered the Positive Affect and Negative Affect Schedule, which was used for affective profiling; the Situational Motivation Scale, which measures intrinsic motivation, identified regulation, external regulation, and amotivation; and the Stress-Energy questionnaire.

Results: Comparisons between the four different profiles, replicating the past findings, showed that individuals with high affective and self-fulfilling profile scored highest in intrinsic motivation, identified regulation, and energy, while they scored lowest in external motivation, amotivation, and the self-fulfilling profile, also lowest in stress. Additionally, the matched comparisons showed, for example, that levels of intrinsic motivation increase when negative affect levels decrease, and positive affect is kept high when positive affect decreases and negative affect is kept low.

Conclusions: One important feature of the affective profiles model is the possibility to compare individuals that are similar in one affect dimension but differ in the other (Garcia, 2011, 2017). This way of discussing individual differences helps to predict what changes could be expected when individuals increase or decrease their experience of positive or negative affect. Importantly, the direction of these changes cannot be addressed from cross-sectional data.

Keywords: Affective Profiles; Energy; Moderation; Amotivation; Stress

Introduction

Affectivity is considered as the expression of positive and negative feelings and emotions stemming from the outcome of individuals' evaluations of the situations and events the individuals are confronted with (Garcia & Archer, 2016; Norlander, von Schedvin & Archer, 2005). Presenting affect as being composed of two systems, each one of them categorized as high and low, leads to four different affective profiles beyond a two-system approach (Garcia, 2011; Garcia, MacDonald & Archer, 2015; MacDonald & Kormi-Nouri, 2013; see also Garcia, Nima,

Lindskär, Jimmefors, Archer & MacDonald, 2018). In this line of thinking, Archer and colleagues have theorized four possible affective profiles based on the combination of people's affectivity levels: self-fulfilling (high positive affect, low negative affect), high affective (high positive affect, high negative affect), low affective (low positive affect, low negative affect), and self-destructive (low positive affect, high negative affect) (Garcia; 2011, 2017; Garcia, Adrianson, Archer & Rosenberg, 2015; Orri, Pingault, Rouquette, Lalanne, Falissard, Herba, Côté & Berthoz, 2017; Kunst, 2011; De Caroli & Sagone, 2016; Di Fabio & Bucci, 2015). These profiles can be used to compare groups of individuals that are similar in one of the two affectivity dimensions (e.g., high in positive affect), but differ in the other dimension (e.g. high

1. University of Borås, Department of Teacher Education, Borås, Sweden
2. Blekinge Center for Competence, Region Blekinge, Karlskrona, Sweden
3. Department of Psychology, University of Gothenburg, Gothenburg, Sweden
4. Department of Behavioral Sciences and Learning, Division of Psychology, Linköping University, Linköping, Sweden
* Corresponding author, Email: danilo.garcia@icloud.com

vs. low in negative affectivity), which allows for a person-centered approach to individual differences research (Garcia, Kjell, Sikström & Archer, 2016; Garcia, Sailer, Nima & Archer, 2016; Garcia, Schütz, MacDonald & Archer, 2016).

Research during the last 15 years has shown the usefulness of the affective profiles model (Garcia, 2017). Individuals that experience high positive affect (i.e. those with a self-fulfilling or a high affective profile) have greater appreciation of life, more security, generally show more self-confidence, more social relations and assertiveness, greater satisfaction of friends, and are often described as passionate, happy, energetic and alert. In contrast, individuals who experience high negative affect, especially those with a self-destructive profile, show greater stress, strain and cynicism as well as lack of control (Norlander, Johansson Bood, 2005). Other diametrical differences, comparisons of individuals with profiles that differ in both affectivity dimensions, show that individuals with a self-fulfilling profile experience higher subjectivity (i.e. satisfaction with life, harmony in life) and psychological well-being (e.g. self-acceptance, personal growth, purpose in life, autonomy) in comparison with individuals with a self-destructive profile. Individuals with a self-fulfilling profile also experience higher levels of energy and optimism along lower levels of stress, depression, anxiety, maladaptive coping, and external locus of control (Garcia & Archer, 2016). Matched differences or differences within individuals with profiles that differ in one affectivity dimension but are similar in the other, suggest that life satisfaction is higher among individuals with a low affective profile than individuals with a self-destructive profile. In other words, suggesting that as long as negative affect is kept low, low levels of positive affect can be associated to the experience of life as satisfying. Matched comparisons are, however, not often discussed in the affective profiles' literature (for a review see Garcia, 2017). This way of discussing

and analysing results is person-oriented and sheds some light on how changes in one affectivity dimension might change a third variable under study, while holding the other affectivity dimension constant (cf. Garcia, MacDonald & Archer, 2015).

A wide range of studies on the affective profiles model have shown consistent evidence among older and younger adults, men and women, and different cultures (Adrianson, Ancok, Ramdhani & Archer, 2013; Garcia, Ghiabi, Rosenberg, Nima & Archer, 2015; Garcia, Nima & Kjell, 2014; Jimmefors, Garcia, Rosenberg, Mousavi, Adrianson & Archer, 2014; Schültz, 2015; Schültz, Sailer, Nima, Rosenberg, Andersson Arnt, Archer & Garcia, 2013; for a review see Garcia, 2017). Thus, suggesting generalizability across the life span, genders and also cross-cultural, see Figure 1 for a compilation of individual differences discerned using the affective profiles model during the past decade. Nevertheless, many of these studies have been conducted with relatively small samples and there has been little interest to replicate the original findings. The possibility to replicate findings is one of the parameters that distinguish science from non-science (Schmidt, 2009). We can, through replications, confirm which findings about human nature that can be generalized and thus increase predictive validity in our regular use of psychological measurements. As researchers, we expect that replication studies are common and that the methodology is well developed; however, particularly in social sciences, the contrary is true, demonstrating an overall replication rate of only 1.07% (Makel, Plucker, & Hegarty, 2012; see also Lucas & Donnellan, 2013, and the Registered Replication Reports initiative by the Association for Psychological Science, http://www.psychologicalscience.org/index.php/replication). In the present study, our aim was to replicate Archer and colleagues' findings (2008; individual differences in motivation, stress, and energy dimensions) using a larger sample described
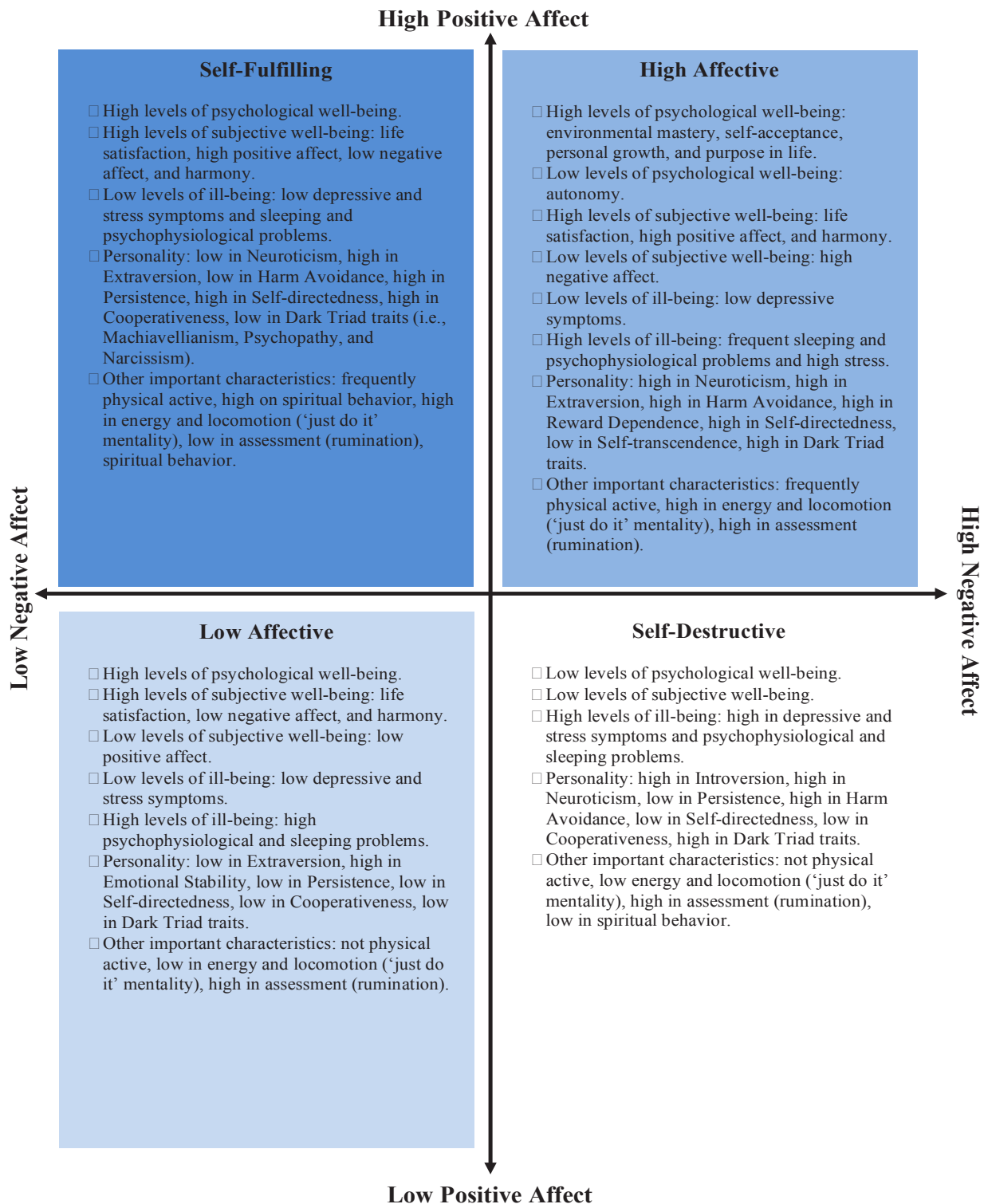
High Positive Affect

Low Negative Affect — **High Negative Affect**

Self-Fulfilling

☐ High levels of psychological well-being.
☐ High levels of subjective well-being: life satisfaction, high positive affect, low negative affect, and harmony.
☐ Low levels of ill-being: low depressive and stress symptoms and sleeping and psychophysiological problems.
☐ Personality: low in Neuroticism, high in Extraversion, low in Harm Avoidance, high in Persistence, high in Self-directedness, high in Cooperativeness, low in Dark Triad traits (i.e., Machiavellianism, Psychopathy, and Narcissism).
☐ Other important characteristics: frequently physical active, high on spiritual behavior, high in energy and locomotion ('just do it' mentality), low in assessment (rumination), spiritual behavior.

High Affective

☐ High levels of psychological well-being: environmental mastery, self-acceptance, personal growth, and purpose in life.
☐ Low levels of psychological well-being: autonomy.
☐ High levels of subjective well-being: life satisfaction, high positive affect, and harmony.
☐ Low levels of subjective well-being: high negative affect.
☐ Low levels of ill-being: low depressive symptoms.
☐ High levels of ill-being: frequent sleeping and psychophysiological problems and high stress.
☐ Personality: high in Neuroticism, high in Extraversion, high in Harm Avoidance, high in Reward Dependence, high in Self-directedness, low in Self-transcendence, high in Dark Triad traits.
☐ Other important characteristics: frequently physical active, high in energy and locomotion ('just do it' mentality), high in assessment (rumination).

Low Affective

☐ High levels of psychological well-being.
☐ High levels of subjective well-being: life satisfaction, low negative affect, and harmony.
☐ Low levels of subjective well-being: low positive affect.
☐ Low levels of ill-being: low depressive and stress symptoms.
☐ High levels of ill-being: high psychophysiological and sleeping problems.
☐ Personality: low in Extraversion, high in Emotional Stability, low in Persistence, low in Self-directedness, low in Cooperativeness, low in Dark Triad traits.
☐ Other important characteristics: not physical active, low in energy and locomotion ('just do it' mentality), high in assessment (rumination).

Self-Destructive

☐ Low levels of psychological well-being.
☐ Low levels of subjective well-being.
☐ High levels of ill-being: high in depressive and stress symptoms and psychophysiological and sleeping problems.
☐ Personality: high in Introversion, high in Neuroticism, low in Persistence, high in Harm Avoidance, low in Self-directedness, low in Cooperativeness, high in Dark Triad traits.
☐ Other important characteristics: not physical active, low energy and locomotion ('just do it' mentality), high in assessment (rumination), low in spiritual behavior.

Low Positive Affect

Figure 1. Summary of the results using the affective profiles model during the past 15 years. Most of these results are based on survey studies with a few exceptions using behavioral data. Reprinted with permission from D. Garcia (Garcia, 2017).

elsewhere (Garcia, Archer, Moradi & Andersson Arntén, 2012) and to discuss our findings in light of matched comparisons within individuals with affective profiles that differ in one affectivity dimension but are similar in the other. Before we develop our expectations, we briefly describe the concepts of motivation, stress, and energy.

Motivation: intrinsic, identified, external, and amotivation

In everyday use, the term *motivation* describes *why* a person does something. Deci and Ryan (1985) developed the theoretical framework on self-determination theory that has been used in numerous studies ever since. The theory involves intrinsic motivation, extrinsic motivation, and amotivation. The theory has been refined (see Vallerand, 1997) to consider external motivation as comprising two components: identified regulation and external regulation. Intrinsic motivation is the individual's satisfaction to participate in an activity, with no reinforcement of any kind. Identified regulation includes behaviours that are important for the individual and is included in a person's set of goals. External regulation are behaviours governed by reward, payment, or threats. When a person does not see any value on an activity or lack competence, it is named amotivation. They are neither intrinsically nor extrinsically motivated but a question of how much worth is it to put effort into an activity (Standage & Treasure, 2002). Internal and external motivation and amotivation differ in their inherent levels of self-determination and it can be expected that intrinsic motivation, as well as identified regulation, are associated with positive outcomes, and negative outcomes are associated with amotivation and external regulation (Guay, Vallerand & Blanchard, 2000).

Individuals with high positive affect profiles (i.e., self-fulfilling and high affective) score higher in intrinsic motivation and identified regulation compared to individuals with low positive affect profiles (i.e. low affective and self-destructive) (Archer et al., 2008; Andersson Arntén, Algafoor, Nima, Schültz, Archer & Garcia, 2015). In a recent study (Garcia & Archer, 2016), it was shown that individuals with a self-fulfilling profile scored lower in external regulation and higher in intrinsic regulation compared to individuals with a self-destructive profile. Individuals with a high affective profile scored also higher than those with a low affective profile in identified regulation and intrinsic regulation. Overall, differences in motivation are partially associated to an individual's affective profile an also associated to levels of stress and energy between individuals (Garcia & Archer, 2016).

Stress and energy

Stress and energy can be seen as opposite emotional states, where stress shows a low activity level and negative evaluations of situations (e.g. high levels of depression, lethargy and boredom) and energy shows high level of activity and also a positive evaluation of situations (e.g. enthusiasm and exhilaration) (Kjellberg & Ivanowsky, 1989). In contrast to the few studies studying motivation in the context of the affective profiles model, numerous studies have indicated that individuals with distinctive affective profiles experience stress and energy differently (Adrianson et al., 2013; Archer et al., 2008; Archer, Adrianson, Plancak, & Karlsson, 2007; Arntén, Jansson & Archer, 2008; Garcia & Archer, 2016; Karlsson & Archer, 2007; Norlander et al., 2005; Watson, Pennebaker, & Folger, 1986). Some studies, with small samples, show that individuals with a self-fulfilling profile report less stress and high degree of energy and optimism (Norlander et al., 2005). These results have been replicated in different studies, individuals with a self-fulfilling profile, compared to individuals with a self-destructive profile, present a more psychologically healthy profile, pertaining to subjective stress and energy, dispositional optimism, depression and anxiety, total stress at work, emotional stability and partner relationships (e.g. Archer et al., 2008; Garcia, 2011; Garcia & Archer, 2016; Schültz, Garcia & Archer, 2014).

The present study

Our aim was to replicate Archer and colleagues'

findings (2008; Study I) using a sample four times larger (originally used in Garcia, et al., 2012; Garcia, Kerekes & Archer, 2012) than the one in their study. Specifically, we investigated differences in motivation (intrinsic motivation, identified regulation, external regulation, and amotivation) and stress and energy between individuals with distinct affective profiles. Moreover, in contrast to Archer and colleagues (2008), we also discuss our results focusing on matched comparisons or differences within profiles that are similar in one affective dimension and differ in the other: self-destructive vs. high affective (matching: high-high negative affect, differing: low-high positive affect), self-destructive vs. low affective (matching: low-low positive affect, differing: high-low negative affect), high affective vs. self-fulfilling (matching: high-high positive affect, differing: high-low negative affect), and low affective vs. self-fulfilling (matching: low-low negative affect, differing: low-high positive affect). By doing so, we aim to shade light on what changes could be expected when individuals increase their experience of positive or negative affect.

Method

Ethical Statement

After consulting with the University of Gothenburg's Review Board and according to law (2003: 460, Section 2) concerning the ethical research involving humans, we arrived at the conclusion that the design of the present study (e.g. all participants' data were anonymous and will not be used for commercial or other non-scientific purposes) required only verbal consent from participants.

Participants and procedure

A total of 655 participants were recruited from different settings in the west of Sweden (e.g. white collar and blue-collar workers at corporate enterprises, government employees, and state-owned and health establishments). Participants were guaranteed complete anonymity and assured that their collaboration was on a voluntary basis. First, the participants completed questions regarding age, gender, and education. Second, they completed the instruments that measure affect and motivation among others. After excluding those who answered less than 95% of the questions, the sample used here comprised 567 participants (233 males, 332 females, 2 unknown) with an age mean of 28.12 years (sd = 13.11).

Instruments

Positive Affect and Negative Affect Schedule (Watson, Clark & Tellegen, 1988). The Swedish version of this instrument used in the present study has been largely used in other studies in the Swedish population (e.g., Garcia et al., 2012; Moradi, Nima, Rapp Ricciardi, Archer & Garcia, 2014; Rapp Ricciardi, Åkerman, Eerikäinen, Ambjörnsson, Andersson Arntén, Archer & Garcia, 2014). Participants are instructed to rate to what extent they generally have experienced 20 different feelings or emotions (10 positive affect and 10 negative affect) for the last four weeks, using a 5-point Likert scale (1 = *very slightly*, 5 = *extremely*). The 10-item positive affect scale includes adjectives such as strong, proud, and interested. The 10-item negative affect scale includes adjectives such as afraid, ashamed, and nervous. In the present study, the positive affect scale showed a *Cronbach's α* = .84 and the negative affect scale a *Cronbach's α* = .77.

Situational Motivation Scale (Guay et al., 2000). The version used here was a modified version that has been altered so that the items refer to individuals' work and/or activities (see Andersson Arntén et al., 2015). The instrument measures four motivation dimensions: intrinsic motivation (e.g., "Because I think my work is interesting"), identified regulation (e.g., "Because I am doing it for my own good"), external regulation (e.g., "Because I am supposed to do it"), and amotivation (e.g., "I do this work but I am not sure it is worth

it"). Each item is answered using a 7-point Likert scale (1 = *extremely disagree*, 7 = *extremely agree*). In the present study, the *Cronbach's α* were between .89 for the intrinsic motivation dimension, .74 for the identified regulation dimension, .82 for the external regulation dimension, and .71 for the amotivation dimension.

The Stress-Energy questionnaire (Kjellberg & Iwanowski, 1989). This instrument assesses experienced stress and energy using 12-items scale and a six-point Likert scale (0 = *not at all*, 5 = *very much*). The stress-energy questionnaire has been validated in Swedish settings (Garcia, Ryberg, Andersson Arnten, Archer & Nima, 2017; Hadzibajramovic, Ahlborg, Grimby-Ekman & Lundgren-Nilsson, 2015). Examples of items for the stress scale are: tense, stressed, pressured (*Cronbach's α* in the present study = .85). Examples of items for the energy scale are: active, energetic, focused (*Cronbach's α* in the present study = .74).

Statistical treatment

As in previous studies (e.g., Adrianson et al., 2013; Archer et al., 2007; 2008), participants' score in the positive affect scale was divided into two parts using the median as reference point. Thereby distributing the participants into one group with high positive affect and another group with low positive affect. The same procedure was implemented for the participants' scores on the negative affect scale. Following this, the results from these two scales were combined, thus, each one of the participants were assigned into one of the four affective profiles: 143 had self-fulfilling profile (high positive affect, low negative affect), 153 had high affective profile (high positive affect, high negative affect), 136 had low affective profile (low positive affect, low negative affect), and 143 had self-destructive profile (low positive affect, high negative affect).

Our sample size was relatively large, thus, including over 20 cases for each cell. Therefore, we anticipated normality of sampling distributions of means. Indeed, according to the Central Limit Theorem, with sufficiently large sample sizes, sampling distributions of means are normally distributed regardless of the distributions of variables (see Tabachnick & Fidell, 2007). In other words, our data met the assumptions necessary to conduct a Multivariate Analysis of Variance (MANOVA) for the investigation of differences between individuals with different affective profiles.

Results

The type of affective profile had a significant effect on the motivation and stress/energy dimensions ($F_{(18, 1680)} = 9.72$, $p < .001$, *Pillai'sTrace* = .28, Observed Power = 1.00). Specifically, individuals with different profiles varied in intrinsic motivation ($F_{(3, 563)} = 21.09$, $p < .001$, Observed Power = 1.00), identified regulation ($F_{(3, 563)} = 12.10$, $p < .001$, Observed Power = 1.00), external regulation ($F_{(3, 563)} = 4.60$, $p < .01$, Observed Power = .89), amotivation ($F_{(3, 563)} = 6.40$, $p < .001$, Observed Power = .97), stress ($F_{(3, 563)} = 25.74$, $p < .001$, Observed Power = 1.00), and energy ($F_{(3,563)} = 20.02$, $p < .001$, Observed Power = 1.00).

As shown in Table 1, individuals with a self-fulfilling profile scored highest in intrinsic motivation compared to individuals with any of the other profiles. Additionally, these individuals also scored higher in identified regulation than individuals with a low affective profile and individuals with a self-destructive profile, while individuals with a high affective profile scored higher in this motivation dimension compared to individuals with a low affective profile. External regulation was higher among individuals with a self-destructive profile, but only compared to those with a self-fulfilling profile. Individuals with a self-destructive or a low affective profile scored higher in amotivation compared to those with a self-fulfilling profile. With respect to stress, the

Table 1. *Means*, *standard deviations* (±), and differences between profiles in motivation and stress/energy dimensions.

Dependent Variable	Self-destructive n = 143	Low Affective n = 136	High Affective n = 153	Self-fulfilling n = 135
Intrinsic Motivation	3.88±1.34	3.77±1.53	4.28±1.59	5.09±1.59[D, L, H]***
Identified Regulation	4.17±1.37	3.82±1.43	4.44±1.38[L]**	4.81±1.47[D, L]***
External Regulation	3.54±1.59[F]**	3.30±1.56	3.26±1.67	2.83±1.62
Amotivation	2.83±1.21[F]**	2.90±1.41[F]***	2.65±1.17	2.29±1.26
Stress	2.40±1.02[L, H, F]***	1.65±0.97	1.83±1.03[F]**	1.37±1.01
Energy	2.70±0.87	3.03±0.94[D]**	3.25±0.93[D]***	3.49±0.80[D, L]***

Note: ** $p < .01$, *** $p < .001$. [D] = higher compared to individuals with a self-destructive profile, [L] = higher compared to individuals with a low affective profile, [H] = higher compared to individuals with a high affective profile, [F] = higher compared to individuals with a self-fulfilling profile.

individuals with a self-destructive profile scored higher than individuals with any of the other profiles, while those with a high affective profile scored higher than individuals with a self-fulfilling profile. Individuals with a low affective, or a high affective, or a self-fulfilling profile scored higher than the self-destructive in energy. The individuals with the self-fulfilling profile also scored higher in energy than individuals with a low affective profile. See Table 1 for the details.

Discussion

In the present study, our aim was to replicate Archer and colleagues' findings (2008) using a larger sample and by discussing our findings in light of comparisons within individuals with matched affective profiles. The results are summarized in Figure 2.

In parallel with Archer and colleagues' findings, individuals with a self-fulfilling (high positive affect, low negative affect) profile scored higher on intrinsic motivation compared to individuals with any of the other profiles: self-destructive profile (low positive affect, high negative affect), low affective (low positive affect, low negative affect), and high affective profiles (high positive affect, high negative affect). These results have been reported in other studies as well (e.g., Andersson Arntén et al., 2015; Garcia et al., 2017). The internal motivated individuals are characterized as active in a behaviour because they participate

voluntarily in different activities without expecting rewards or external pressures, because the activity itself is rewarding and satisfying (Deci & Ryan, 1985). Individuals with a self-fulfilling profile scored higher on identified regulation than self-destructive and low affective individuals, respectively. Furthermore, individuals with a high affective profile scored also higher than those with a low affective profile on identified regulation. For instance, police personnel with a self-fulfilling or a high affective profile score higher in both intrinsic motivation and identified regulation compared to personnel with a low affective and self-destructive profile (Andersson Arnten et al., 2015).

Individuals with a self-destructive profile scored higher on external regulation than individuals on the self-fulfilled profile (see also Archer et al., 2008 and Andersson Arntén et al., 2015). This implies that the self-fulfilled individuals follow their inner motivation to a higher degree while self-destructive individuals try to avoid punishment or gain rewards (Deci & Ryan, 1985). Finally, individuals with a self-destructive profile and low affective profile scored significantly higher than individuals with a self-fulfilled profile on amotivation. This is also in line with past studies (e.g., Anderson Arnten et al., 2015) showing that individuals with a self-destructive profile scored higher on amotivation compared to all other profiles. Indeed, lack of goals and disengagement in activities are related to amotivational behavior and high negative affect
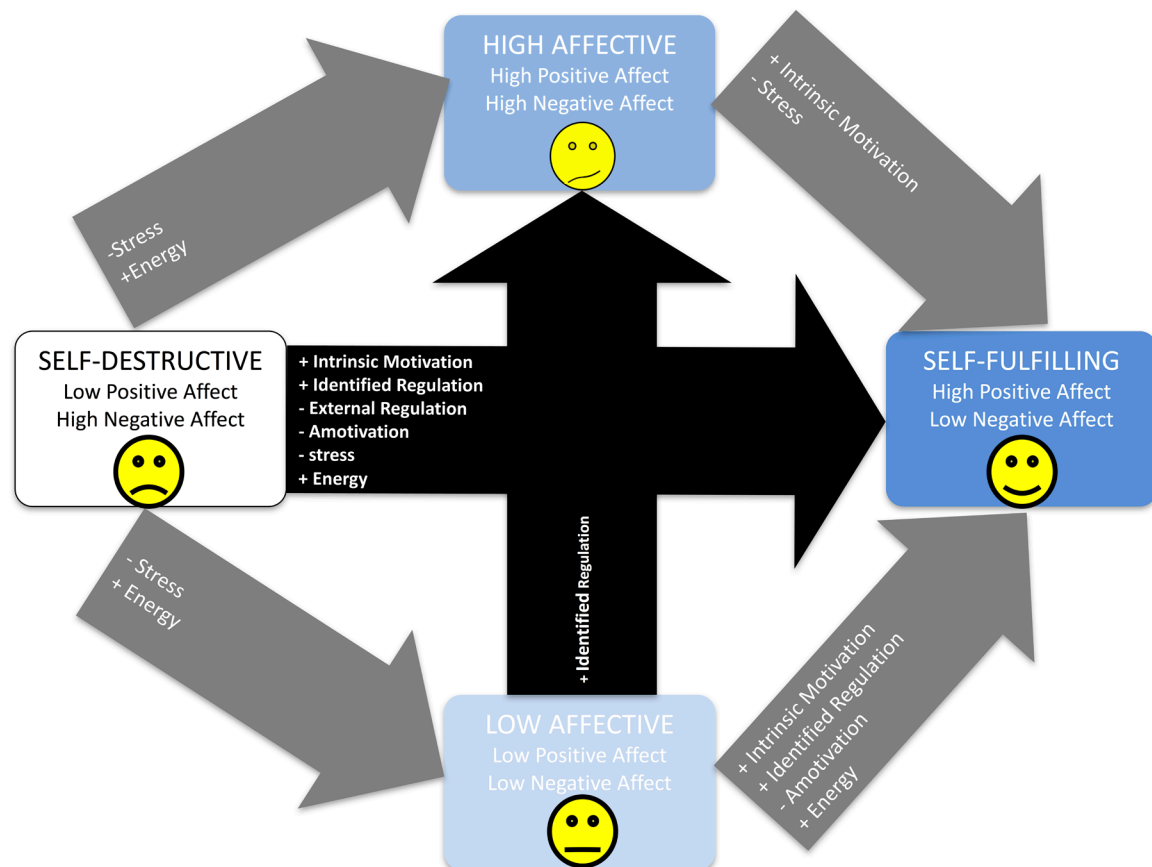
Figure 2. Results from the diametrical and matched comparisons in motivation, stress, and energy between individuals with different affective profiles.

Note: Diametrical differences found between individuals with affective profiles that are at their extremes (Black arrows): self-destructive vs. self-fulfilling (low-high positive affect, high-low negative affect) and low affective vs. high affective (low-high positive affect, low-high negative affect). Within differences found when individuals were matched in one affective dimension, and differed in the other (Grey arrows): self-destructive vs. high affective (matching: high-high negative affect, differing: low-high positive affect), self-destructive vs. low affective (matching: low-low positive affect, differing: high-low negative affect), high affective vs. self-fulfilling (matching: high-high positive affect, differing: high-low negative affect), and low affective vs. self-fulfilling (matching: low-low negative affect, differing: low-high positive affect). **Reprinted with permission from Well-Being and Human Performance Sweden AB**.

with subjective complaints and poor coping skills (Karlsson & Archer, 2007).

As in Archer and colleagues' findings, individuals with a self-destructive profile showed greater stress than the other three profiles (see also Norlander, Johansson Bood, 2005) and less energy, while the self-fulfilled profile showed lesser stress and greater energy than the self-destructive and low affective profiles (also in Garcia & Archer, 2016). Individuals with a high affective profile also showed greater stress than individuals with a self-fulfilled profile. Both high and low affect showed greater stress and greater energy in comparison with

the self-destructive profile (Archer et al., 2008; Garcia, 2011; Garcia & Archer, 2016; Schültz, et al., 2014).

Results from the matched comparisons showed that individuals' intrinsic motivation might go up in two different conditions: (1) by increasing positive affect while negative affect is low (low affective vs. self-fulfilling), and (2) when negative affect goes down and positive affect stays high (high affective vs. self-fulfilling). In other words, increasing positive affect when negative is high (self-destructive vs. high affective) or decreasing negative affect, when positive affect is low (self-

destructive vs. low affective), would not have an effect on an individual's level of feeling intrinsically motivated. In addition, identified regulation increases and amotivation decreases when levels of positive affect go up and negative affect is kept low (low affective vs. self-fulfilling). See Figure 2, gray arrows. This is in line with earlier research (Garcia, Sailer, Nima & Archer, 2016) showing that individuals with a low affective profile achieve homeostasis by seeing their life path as controlled by external forces, avoiding to worry about the future because they see it as uncontrollable, believing in luck or fate rather than hard work, and avoiding to set goals. Moreover, the matched comparisons showed that individuals' stress levels go down in three different conditions: (1) when positive affect goes up, even when negative affect stays high (self-destructive vs. high affective), (2) when negative affect goes down and positive affect stays high (high affective vs. self-fulfilling), and (3) when negative affect goes down and positive affect stays low (self-destructive vs. low affective). In other words, increasing positive affect while negative affect is low (low affective vs. self-fulfilling) should not have an effect on a person's stress levels. With respect to energy, levels in energy go up in three different conditions: (1) when positive affect goes up and negative affect stays either down (low affective vs. self-fulfilling) or (2) stays high (self-destructive vs. high affective), and (3) when negative affect goes down and positive affect stays low (self-destructive vs. low affective). Hence, decreases in negative affect should not have an effect on energy levels when positive affect is high (high affective vs. self-fulfilling). See Figure 2, gray arrows.

Limitations and future research
The present study was cross-sectional and data was self-reported, thereby limiting the generalizability of the findings. Moreover, the validity of the median split method to differentiate the four affective

profiles is still up for debate. For example, it is plausible to argue that dichotomizing into groups that are classified as being low or high on traits will likely cause loss of power that is equivalent to the loss in sample size (i.e., Type II errors; MacCallum, Zhang, Preacher & Rucker, 2002; Humphreys, 1978; Lagakos, 1988). However, despite median splits making our analyses more conservative, we found significant differences in our sample. Nonetheless, since median splits distort the meaning of high and low, it is plausible to criticize the validity of this approach to create the profiles—scores just-above and just-below the median become high and low by arbitrariness, not by reality (Garcia, MacDonald & Archer, 2015). That is, there is still a risk that dichotomizing might have led to spurious main effects (cf. MaCallum, Zhang, Preacher & Rucker, 2002). There is, however, recent evidence of the statistical robustness and valid use of median splits (Iacobucci, Posavac, Kardes, Schneider & Popovich, 2015ab) and also evidence of median splits being as reliable as more advanced cluster methods (Garcia, MacDonald & Archer, 2015; MacDonald & Kormi-Nouri , 2013). In short, although there is a risk for misleading results when using median splits, stating that median splits produce inferior analytic, conclusions is a simplification and misconception of the real issue (Iacobucci, Posavac, Kardes, Schneider & Popovich, 2015ab).

Conclusion and implications-
One important feature of the affective profiles model is the possibility to compare individuals that are similar in one affect dimension but differ in the other dimension (Garcia, 2011, 2017). This way of discussing individual differences helps to predict what changes could be expected when individuals increase their experience of positive or negative affect. Importantly, the direction of these changes cannot be addressed from our cross-sectional data. That being said, one causal direction or the other,

the matchings comparisons showed that when intrinsic motivation increases and stress decreases in the same time as positive affect is kept high, negative affect will decrease (high affective going towards self-fulfilled), if identified regulation and energy increases and amotivation decreases at the same time as low negative affect is kept high, positive affect will increase (low affective going towards self-fulfilled), and decreases in stress and increases in energy might lead to higher positive affect when negative affect is kept high (self-destructive vs. high affective), and it might also lead to lower negative affect when positive affect is kept low (self-destructive vs. low affective).

"Energy is an eternal delight, and he who desires, but acts not, breeds pestilence."
William Blake.

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