

Self-Concordance Theory and the Goal-Striving Reasons Framework and their Distinct Relationships with Hedonic and Eudaimonic Well-Being

1. Introduction

The reasons why people strive for their most important goals has a causal influence on their well-being (Judge, Bono, Erez, & Locke, 2005; Sheldon, Ryan, Deci, & Kasser, 2004). Thus, concepts that capture relevant differences in the reasons as to why people pursue their most important goals are an important aspect within the well-being literature. Furthermore, and drawing on related literature (McGregor & Little, 1998; Nix, Ryan, Manly, & Deci, 1999), differences in the reasons for goal pursuit are likely to relate differently to different forms of well-being such as the extent to which people experience positive emotions or experience their life as meaningful. Thus, it is highly important to understand which characteristics of goal reasons are most closely associated with which form of well-being. Not the least, because this also allows us to offer the most relevant and most effective Positive Psychology Interventions (PPIs) to improve a specific form of well-being.

Two important concepts that measure the quality of people's reasons for goal pursuit are the *self-concordance theory (SCT; Sheldon & Elliot, 1999)* and the *goal-striving reasons framework (GSRF; Ehrlich, 2012)*. SCT measures the quality of people's reasons by capturing their degree of autonomous goal motivation. That is to which degree people strive for their goals out of self-choices rather than being driven by some form of external pressure. More precisely, SCT distinguishes between two autonomous forms of goal motivation which are pursuing a goal because of its task-inherent positive intrinsic appeal or because a person strongly identifies with the goal. It also captures two controlled forms of goal motivation

which are pursuing a goal for introjected reasons or because of external pressures. SCT is the most widely used theory to measure the 'why of goal pursuit'.

GSRF on the other hand measures the quality of reasons based on the approach/avoidance dimension. It distinguishes whether a person's reasons for goal pursuit are aimed at workings towards a desirable outcome or moving away from an undesirable outcome (Elliot, Sheldon, & Church, 1997). GSRF further distinguishes within approach and avoidance reasons whether the reason is aimed at the person itself (within-person reason) or at an external situation (person-environment reason)^[1]. Based on this, GSRF distinguishes between the following two approach reasons: pursuing a goal because it is highly enjoyable (Pleasure) and pursuing a goal because it helps others (Altruism). The two avoidance reasons are pursuing a goal because not achieving this goal would negatively affect a person's self-esteem (self-esteem loss), or pursuing a goal out of necessity whereby a person has to pursue the goal in order to avoid not being able to make a decent living (Necessity).

Both models have conclusively shown to have a strong influence on people's well-being (Ehrlich, 2021; Ehrlich & Bipp, 2016; Judge, et al., 2005; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001; Sheldon, et al, 2004). However, existing studies whereby the relative predictive power of both models has been tested simultaneously focused exclusively on *Subjective Well-Being (SWB)*. Thus, further studies need to establish how the two goal-reasons models are related to other forms of well-being beyond SWB. This is because, SWB only captures people's *hedonic well-being (HWB)* which focuses on the attainment of pleasure and the avoidance of pain, typically measured through life satisfaction as well as Positive Affect (PA) and Negative Affect (NA; Kahneman, Diener, & Schwarz, 1999).

Hedonic well-being is typically juxtaposed to *eudaimonic well-being (EWB)* as a form of well-being that captures the degree to which people are seen as fully functioning and leading a life full of meaning, authenticity, and purposefulness (Martela & Sheldon, 2019; Ryff, 1989; Ryff & Singer, 1998; Waterman et al., 2010).^[2] In other words, forms of eudaimonic well-being capture the degree to which a person lives a good and virtuous life rather than a pleasurable life (Ryan & Deci, 2001). Thus, eudaimonic well-being is a very different form of well-being compared to hedonic well-being but captures another fundamental element of human existence.

Until recently, only a few comparative studies have been undertaken that investigate the relative predictive power of the two goal-reason theories in relation to HWB (Ehrlich & Bipp, 2016; Ehrlich, 2021). Any studies on EWB in this context are missing completely. However, a better understanding about which of the two-goal reason dimensions (autonomous/controlled versus approach/avoidance) is more closely associated with which form of well-being is needed (Ehrlich, 2021). This is important as related research in this context has clearly shown that capturing different qualities of people's goal-reasons relates differently to different forms of well-being. For example, Nix, et al. (1999) show that it is possible to predict happiness (Positive Affect) through goal attainment alone. Goal attainment, in conjunction with autonomous goal pursuit, however, can predict happiness as well as vitality. This illustrates how important it is to know which characteristics of goal-reasons are most relevant for which specific form of well-being. It is also important as this provides information on how to help individuals to increase their hedonic or eudaimonic well-being. Mostly because PPIs focussing on autonomy are different to PPIs focussing on approach motivation.

This paper aims to contribute to this research gap by identifying which form of well-being is most strongly related with autonomous/controlled goal motivation and which form of well-being is most strongly related with approach/avoidance goal motivation. Given the conclusive evidence of the causal impact of goal-striving reasons on well-being, as stated before, we argue that the analysis based on correlative associations between GSRF/SCF and different forms of well-being is justified in this context.

2. Self-concordance theory; the goal-striving reasons framework and their relation to well-being

SCT has been shown to be a strong predictor of peoples' eudaimonic well-being. This is because, as Ryan, Huta, and Deci (2008, p. 139) point out "eudaimonic pursuits are voluntary, and are expressions of the self rather than products of external control or ignorance". Thus, eudaimonic pursuits or activities fundamentally require to be driven by autonomous motivation according to Ryan et al. (2008).

This link between autonomous goal pursuits and facets of EWB is most conclusively established in relation to people's basic needs satisfaction – one of the key indicators of people living a fully functioning life. Autonomous goals have been clearly linked to the satisfaction of people's needs for autonomy, competence, and relatedness. The precise processes by which self-concordance leads to the satisfaction of the three basic needs are best described by Sheldon and Elliot (1999, p. 485):

“...individuals with more self-concordant goals are expected to try harder and thus do better at achieving their goals, on average. Accordingly, such individuals are likely to feel more effective and competent in many of the daily activities that they engage in during the period of study. Along the way, those who pursue self-concordant goals should spend more time engaged in autonomous (i.e., freely chosen and meaningful) behavior. This is because many of their daily activities will effectively express their evolving interests and personal values. Finally, those pursuing goals for self-concordant reasons should tend to have stronger feelings of relatedness to others.

Because many self-concordant goals involve helping others, the community, or both (Carver & Baird, 1998; Sheldon & Kasser, 1995)”

Beyond the link to basic needs satisfaction, autonomous goal pursuits are also likely to be associated with other facets of EWB. One of the most widely used indicators of a life well-lived, representing eudaimonic forms of well-being (Ryan & Deci, 2001), is captured within Ryff's (1989) *psychological well-being scale (PWB)*; Martela & Sheldon, 2019). It contains the following six facets: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Ryan et al. (2008) have argued that self-concordance is very likely to be associated with these six facets of EWB. The relationship between autonomous goal pursuit and autonomy, positive relations to others, growth/mastery is hereby obvious given the closeness of these facets to the three basic needs described above.

More interesting in this context is the relation between autonomous goal pursuit and self-acceptance as well as purpose. Here it can be argued that people who engage in freely chosen activities are likely to find those more purposeful. Freely chosen activities are also more likely to contribute to a person's sense of self-acceptance as they engage in an activity that is in line with their interests and beliefs (Sheldon & Elliot, 1999). To sum up, the literature provides some arguments why SCI should be correlated positively with purpose and self-acceptance - two forms of eudaimonic well-being that go beyond the three basic needs.

Finally, whilst SCT is typically more strongly related to eudaimonic well-being - and in particular with basic needs satisfaction - several studies show empirically that self-concordance is also significantly related to HWB. For example, Sheldon and Elliot (1999) report a correlation of .29 between self-concordance and SWB which is similar to Sheldon et al. (2004) where a correlation of .33 is reported across four different cultures. Other studies

report similar results (Judge et al., 2005; Kennon Sheldon, Gordeeva, Sychev, Osin, & Titova, 2022; Sheldon and Elliot, 1999). Overall, one can conclude that there is a large body of literature that shows a moderate relationship between SCI and HWB. This suggests that a person who engages in self-concordant activities will typically experience considerable happiness and pleasure (Ryan & Deci, 2001; Ryan et al., 2008).

In comparison to the SCT literature, there are far fewer studies available in relation to GSRF and its predictive power for HWB and EWB. All available studies focus on HWB (Ehrlich & Milston, 2023). The close relations between GSRF and HWB is not surprising given that the approach/avoidance dimension aligns very closely with the concept of seeking pleasure and avoiding pain – i.e. the key components of hedonic well-being. This relationship is evident when looking at the goal-setting literature in general which has conclusively shown that people with predominantly approaching goals report higher levels of HWB than people with predominantly avoidance-driven goals (Carver & Scheier, 1999; Elliot & Sheldon, 1997; Judge et al., 2005).

Empirically, Ehrlich and Bipp (2016) report correlations between GSRF and SWB ranging between .45 to .54. Ehrlich (2021) reports correlations between .47 and .49, whereas Ehrlich and Milston (2023) report correlations between .36 to .46. Some of these studies also compared the predictive power of the GSRF directly with the SCI through hierarchical multiple regression analyses. In all of those comparisons, GSRF remained the stronger predictor of HWB (Ehrlich, 2018, 2021; Ehrlich & Bipp, 2016).

Conversely, the literature about GSFR in relation to EWB is non-existent. However, this does not mean that the GSRF cannot predict forms of eudaimonic well-being as, according to Huta and Ryan (2010), goals that are predominantly aimed at increasing hedonic well-being are not necessarily mutually exclusive to having a positive contribution to EWB. This is

because it is difficult to believe that someone who engages in (long-term) goals that they enjoy does not feel that this is time well spent and that they are doing something meaningful. Ryan et al. (2008 p. 141) write in this context “Accordingly, from our perspective, positive affect and pleasure, are both correlates and consequences of living well – of eudaimonia”.

GSRF could therefore also potentially predict people’s satisfaction of their needs for autonomy, competence, and relatedness. One reason for this assumption is simply the fact that approach reasons are quite often autonomously chosen (Elliot et al., 1997; Judge et al., 2005)^[3]. Equally, approach reasons are likely to relate positively to the need for competence as people are more likely to want to pursue a goal more if they feel effective and capable of achieving this goal (Bandura, 1977; Deci & Ryan, 2004). Approach goals can also be assumed to be quite often driven by relating positively with others as people typically want to connect meaningfully with others. Similar connections can be made in relation to self-acceptance and purpose. Stated simply, the more people do what they want to do, the more they hold a positive view about themselves and the more they find what they are doing purposeful.

Overall, the literature around SCT and GSRF in relation to HWB and EWB suggests that both goal models predict both forms of well-being. The question remains though, which form of well-being is more closely associated with which goal-reason model? The literature presented in the previous two sections suggests the following. Based on the cited empirical studies we can hypothesize that:

H1: GSRF is a stronger correlate of HWB compared to SCT.

Based on theoretical arguments presented above we can hypothesize that:

H2: SCT and GSRF are equally strong correlates of the three basic needs of autonomy, competence, and relatedness.

H3: Self-acceptance and purpose are equally strong correlated with GSRF and SCT.

3. Method

3.1. Participants

The study draws on a mature sample of 124 participants with an average age of 46 years ($SD = 9.88$). All participants worked in an English-speaking work context, i.e. either worked for an UK based company or an international company. 76 (61%) of the participants identified as female and 48 (39%) as male. 101 participants (81%) were holding a master's degree or higher qualification. Of the remaining participants 20 reported to have a bachelor's degree, and three had A-levels or GCSEs. 73 reported that they work in a management position overlooking a team at work whereas 51 had no managerial responsibility. 79 participants reported working in the private sector, 37 in the public sector and eight participants indicated to work in both sectors.

3.2. Procedures

Participants were asked to complete an online questionnaire that contained all main study variables as well as demographic items including work related information, which the study aimed to control for. Recruitment followed a convenience sample strategy and participants were recruited through social media advertisements, mostly via LinkedIn, given its

(predominantly) work-based focussed. Within the online questionnaire the forced-answers setting was chosen to avoid missing data and all participants not completing a full data set were eliminated listwise⁴. Participants had to be in work to be eligible to take part in this study which included any type of work (full-time, part-time, self-employed). Additionally, participants had to be between 18 and 65 of age. All were asked to complete the goal-striving reasons measure and the self-concordance measure on the basis of their three most important goals at work. Participation was voluntary and not financially rewarded although participants could opt-in to receive an individual report about their personal well-being containing the outcomes of the main study variables. Ethical approval was obtained prior to this study, which required participants to state their informed consent before completing the questionnaire. Data analysis was conducted using SPSS V.26.

3.3. Measures

3.3.1. Goal-striving reasons framework

The short, eight-item, version of the Goal Striving Reasons Questionnaire (Ehrlich, 2021) was used to measure each of the four goal-striving reasons with two items each. Example of items consist of ‘I am having fun working on this goal’(Pleasure); ‘It serves a good cause’(Altruism); ‘If I fail, I would feel like a loser’(Self-Esteem); and ‘It helps me to make a living’(Necessity). The internal reliability of this scale is reported with $\alpha = .74$ to $.76$ (Ehrlich 2021). Items needed to be rated on a seven-point Likert scale which ranged from 1 (not true at all) to 7 (very true). Based on this data an overall *goal-striving reasons index (GSRI)* can

be calculated by summing up the scores for pleasure and altruism across all three goals and subtracting the sum of scores for self-esteem and necessity.

3.3.2. Self-concordance

Self-concordance is measured using the self-concordance items described in Sheldon and Hoon (2007). It contains four items each of which represents one of the four types of goal motivation. Examples of items are: “It is intrinsically interesting or challenging” (intrinsic); “I identify with it” (identified); “I’d feel guilty, anxious, ashamed if I didn’t” (introjected); “I have to or the situation demands it” (external pressures). Similar to the GSRI an overall *self-concordance index (SCI)* can be computed by averaging the scores of the two autonomous forms of goal motivation (intrinsic/identified) and subtracting the average scores for the two controlled forms of goal motivation (introjected/external pressures). A seven-point Likert scale was used identical to the one used for GSRI. Internal reliability for the self-concordance measure is reported with .70 to .80 (Sheldon et al., 2004).

3.3.3. Subjective Well-being measures

As a measurement of general life satisfaction, the Satisfaction with Life Scale (SWLS; Diener et al., 1985) is used. This scale offers high reliability and is the most used scale to measure life satisfaction. The five items consist of statements like ‘In most ways, my life is close to ideal’, which participants must rate on a seven-point Likert scale ranging from (1) strongly disagree to (7) strongly agree.

To measure affect balance the Positive Affect/ Negative Affect Schedule (PANAS) was used (Watson et al., 1988). It consists of 20 items describing various affects experienced in the last month (for example ‘attentive’, ‘interested’, ‘nervous’) and is rated on a five-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). In line with previous research (Ehrlich, 2021) a general score for *Affect Balance (AB)* can then be calculated by building the difference between the positive and negative affect scores.

An overall subjective well-being (SWB) score has also been created, following the procedure as described by Sheldon and Elliot (1999) by standardising the SWLS, PA and NA scores and subtracting NA from the sum of SWLS and PA.

3.3.4. Basic Need Satisfaction

To measure basic needs satisfaction the 16 item version of the Basic Needs Satisfaction Survey as reported by Johnston and Finney (2010) was used. This questionnaire measures the need for autonomy (measured with three items, for example, “I feel like I am free to decide for myself how to live my life.”), the need for competence (six items, for example, “People I know tell me I am good at what I do”), and the need for relatedness (seven items, for example “really like the people I interact with.”). Internal reliability is reported to range between .60 and .80 for a sample of psychology students (Johnston & Finney, 2010). Participants answer the items on a seven-point Likert scale ranging from (1) not true at all to (7) very true.

3.3.5. Purpose and Self-Acceptance

Purpose and self-acceptance were measured using the two relevant scales from Ryff's (1989) *Psychological Well-Being Scale (PWB)*. The selection of scales from the overall scale is hereby admissible (Johnston & Finney, 2010). Both scales are measured with nine items each, i.e. are based on the 54 items version of the overall PWB scale (Ryff, 1989). The facet of purpose captures the extent to which people hold beliefs that give life meaning. The facet of self-acceptance captures the degree to which an individual has a positive attitude towards themselves. Examples of items are: "In general, I feel confident and positive about myself (Self-Acceptance) and "Some people wander aimlessly through life, but I am not one of them" (Purpose). Participants are asked to use a six-point Likert scale ranging from (1) strongly disagree to (6) strongly agree.

4. Findings

4.1. Descriptive statistics of main study variables

Overall, the descriptive statistics of the main study variables (Table 1) show that the sample reported on average more approaching than avoidance as well as more autonomous than controlled goal motivation resulting in positive GSRI and SCI scores. Equally, all measures of HWB and EWB indicate that the sample reported high levels of positive psychological functioning in both forms of well-being. SCI as well as the need for autonomy and the need for competence reported slightly lower internal reliabilities, which is not unusual for those two scales, as it has been reported in the literature before (Ehrlich & Bipp, 2016; Johnston & Finney, 2010; Sheldon et al., 2004; Sheldon, Ryan, Deci, & Kasser, 2004). With regards to the intercorrelations reported in Table 1, the findings show that both indices (GSRI, SCI) correlate significantly with all measures of well-being. GSRI is descriptively higher correlated with all well-being measures.

< insert table 1 >

The correlations in Table 1 give a first indication in relation to the testing of the three hypotheses. With regards to H1 it can be noted that the correlations between GSRI and HWB (Subjective Well-Being, Affect Balance and Life Satisfaction) are considerably higher compared to correlations between SCI and HWB. This is in support of H1. In relation to H2, it can be noted that the correlations between SCI and GSRI with variables around basic needs satisfaction are quite similar which is in support of H2. Regarding the correlations between GSRF and SCI with purpose and self-acceptance the correlations in Table 1 show that GSRF correlates descriptively higher with these facets compared to SCI. This suggests that H3 is not supported, as SCI and GSRI are not equally strongly correlated with those facets of EWB.

4.2. Analysis

To specifically test the relative correlative strength of two goal models, further analyses beyond bivariate correlation analysis are required. To this end, multiple regression analyses were conducted whereby SCI and GSRI were entered simultaneously whilst controlling for the two most commonly used control variables in well-being studies: age and gender⁵. Further work-related demographic variables (management responsibility, sector) revealed no significant relations to any of the well-being variables and therefore were not considered further. According to G*Power (Faul, Erdfelder, Buchner & Lang, 2009) the minimum sample size to detect a small effect size of .15 (error probability of .05; power of .90) is $N = 108$, which the given sample size of the study at hand exceeds (cf. Green, 1991).

The results of the multiple regression analyses (Table 2) show strong differences in the case of hedonic well-being (Subjective Well-Being, Affect Balance and Life Satisfaction) with beta weights for GSRI all above .40 whereas none of the beta weights for SCI are higher than .04. This provides strong support for H1.

<insert table 2 here>

In relation to BNS, as an indicator for eudaimonic well-being, the beta weights for GSRI and SCI are more similar (Table 2). Whilst GSRI is descriptively still the stronger predictor throughout, the beta weights for SCI are higher here – ranging from .11 to .20 and are also more similar to the beta weights of GSRI. This indicates that SCI is a better predictor for basic needs satisfaction than it is for hedonic well-being, which is very much in line with the literature which states that self-concordance enables basic needs satisfaction. The findings therefore provide some tentative support for H2. With regards to GSRI and SCI as predictors for purpose and self-acceptance the findings reveal a similar picture as for hedonic well-being. GSRI has far higher beta weights for both forms of EWB when GSRI and SCI are entered simultaneously (Table 2).

Given the findings above further analyses are warranted whereby GSRI and SCI are entered separately as predictors within multiple regression analyses (Table 3). It is noteworthy in this context to point out that GSRI and SCI when entered alone all both significant in their own right. However, in the case of SWB, SWLS, and AB (the three forms of hedonic well-being), GSRI reveals much higher beta weights of .48, .41 and .42 whereas the corresponding Beta weights of SCI are only .30, .23 and .29 (Table 3). Thus, on average the differences in beta weights between GSRI and SCI is.16.⁶

< insert table 3 here >

This is different in the case of basic needs satisfaction where the beta weights for GSRI are .43, .46, .34, and .27 whilst the corresponding beta weights for SCI are much more similar in strength with .38, .40, .31 and .23 (Table 3). Using the same formula than above, the average difference in beta weights is here only .05 compared to .16 as for HWB. This again provides some support for H2 which states that SCI is an equally good correlate of basic need satisfaction than GSRI.

In relation to self-acceptance and purpose, the findings are again very similar to HWB (Table 3). The beta weights for GSRI are much higher with .42 and .48 in comparison to SCI with beta weights of .22 and .35. The average difference in beta weights is again rather high with .17. H3 is therefore rejected.

The findings presented in table 3 reveal descriptively which of the two goal-reasons models yields stronger associations with the respective well-being forms. To establish whether these differences are significant requires an additional analysis in form of the comparison of the predicted estimates based on both models, using the R value for each of the two regression models (self-concordance, age, gender versus goal-striving reasons, age, gender) and the various forms of well-being. The two comparable R scores represent the correlation between the predicted estimates for each of the models and the different forms of well-being. Differences in correlation coefficients can be compared using Steiger's test of difference between two dependent correlations with one variable in common (Steiger, 1980).

< insert table 4 here >

The findings show that the goal-striving reasons framework (when controlled for age and gender) correlates significantly higher with all three forms of hedonic well-being (SWB, SWLS, Affect Balance). No significant differences can be found in relation to Basic Needs Satisfaction whereas for purpose there was again a significant higher correlation for the goal-

striving reasons model albeit the differences in correlation for acceptance was only descriptively higher but only significant on a 10% level¹.

5. Discussion

The aim of the paper was to identify which form of well-being is most strongly related with which of the two goal-reasons models. The results of this study show that GSRF is descriptively stronger related with both forms of well-being compared to SCT. However, it is also important to note that SCT was in all cases also significantly correlated with well-being. Thus, the findings of the study are in line with previous research on the reported predictive power of SCI for well-being (Deci & Ryan, 2000; Judge et al., 2005; Sheldon et al., 2022). This is important as it means that the stronger relationship between GSRF and well-being was not due to the fact that, in this particular study, the relationship between SCT and well-being was unusually low. This provides compelling evidence for the relevance of the goal-striving reasons framework in relation to well-being.

Looking more closely, the findings in relation to HWB, show that GSRF is significantly stronger correlated with hedonic well-being compared to SCT. This is not surprising given that the underlying theoretical foundation of GSRF is the approach/avoidance dimension (working towards a desirable, pleasurable outcome and trying to move away from an undesirable/painful outcome). Thus, GSRF is much closer aligned

¹ Please note that for Affect Balance the z-score is significant as the one-tailed p-score was used. This is because H1 was directional in terms of the goal-striving reasons framework was anticipated to correlate stronger with hedonic well-being compared to the self-concordance theory. In relation to acceptance the two tailed significance score was used as H3 anticipated no differences in the relationships between goal-striving reasons and self-concordance and acceptance.

with forms of hedonic well-being which is based on the pleasure/pain principle (Kahneman et al., 1999). This is why, the findings presented here strongly suggest that GSRF is the model of choice in the context of HWB.

Conversely, the findings also show that SCT and GSRF do not differ significantly in their correlations with basic needs satisfaction. This is in line with the vast body of literature which conclusively shows that self-concordance leads to basic need satisfaction (Deci and Ryan, 2000). Indeed, the literature around the underlying processes of how self-concordant goal pursuits lead to basic needs satisfaction is understood in far more detail than the processes by which the GSRF leads to basic need satisfaction (Sheldon & Elliot, 1999). Hence, it can be concluded that SCT is the goal-reason model of choice if researchers are interested in people's EWB based on how much their basic needs for autonomy, competence, and relatedness are satisfied. This is despite the fact that GSRF is empirically the descriptively stronger predictor (although not significant). However, for future research with a specific focus on basic needs satisfaction it can be argued that SCT should be used – given its vast body of literature supporting this relationship.

The findings around self-acceptance and purpose reveal that GSRF is the stronger correlate of these eudaimonic well-being facets compared to SCT. This difference is significant for purpose on a 5% level but only on a 10% level for acceptance. Overall, the findings lead to the conclusion that GSRF is the model of choice for these two facets of EWB.

The different relations between SCT and GSRF with the various forms of well-being has important theoretical implications as it further substantiates the theoretical differences between GSRF and SCT (Ehrlich, 2021). What are the key differences between the two goal-reason models that explain these different relationships to well-being? Here, one can argue

that the four goal-striving reasons within GSRF capture aspects of people's goal-striving reasons that relate more deeply to the core of people's positive and negative emotional experiences in life. In other words, the four goal-striving reasons go "closer to the bone" compared to the four reasons measured by SCT. It does so, because the approach/avoidance dimension allows for the inclusion of aspects affecting one's goal-striving reasons that are wider-reaching compared to the reasons that capture a person's degree of autonomous goal motivation. This becomes clearer when the operationalisation of the four goal-striving reasons is compared with the content of the four adjacent reasons within SCT (pleasure vs intrinsic; altruism vs identified; self-esteem vs introjected and necessity vs. external pressures).

With regards to pleasure, GSRF asks how much enjoyment an individual gets from pursuing a goal per se. The amount of enjoyment is hereby not restricted to the enjoyment derived from task-inherent incentives as conceptualised within SCT (Ehrlich, 2021). Hence, a person's total amount of fun (for example through task-inherent incentives but also praise, positive feedback/encouragement from others)^[7] is more strongly related to a person's well-being than the fun "only" derived from the task itself. Also, the degree to which someone pursues a goal to help others is much closer aligned to how a person feels about themselves compared to identified motivation which captures how important a goal is to a person. This is because, helping others feels good and contributes strongly to our well-being (Dunn, Aknin, & Norton, 2008; Lyubomirsky, 2010). Thus, asking specifically how much the pursuit of a goal benefits others is more strongly associated with one's well-being than asking how important a goal is to the person. This is because highly important goals potentially include self-centred goals that might not have any positive effect on others. Indeed, a person could pursue an important goal that negatively impacts others (Sheldon & Elliot, 1999). Thus, the

degree to which the pursuit of a goal has a positive impact on others is more closely related to a person's well-being than the sheer importance of a goal per se.

The goal-striving reason of self-esteem is again capturing the very existential need of people not to lose their positive view about themselves which can have dramatic negative consequences for a person's well-being (Crocker & Park, 2004). Loss of self-esteem is also based on the notion of avoiding failing in an important goal. Introjected reasons on the other hand, as the counterpart of self-esteem reasons within SCT, capture the degree to which a person feels guilty, anxious or ashamed if they do not pursue this goal. Whilst this is similar to self-esteem loss, introjected goal motivation captures slightly less severe negative feelings than self-esteem loss. This is further amplified by the fact that self-esteem is coated in a more existential context of avoiding personal failure, whereas introjected goal pursuit is coated in a context of not engaging in a certain goal. Finally, necessity captures the degree to which people feel they have to pursue a certain goal because otherwise, they cannot make a decent living. Here again, external pressures are far more neutral whether the pursuit of a goal is demanded by external forces or the situation. This does not directly encapsulate the degree to which people feel "threatened" by losing their quality of life. Based on these observations it seems evident that GSRF is more closely related to hedonic well-being as well as aspects such as self-acceptance and purpose when compared to SCT.

The findings of this study also have practical implications. Firstly, it informs scholars which model to use in which circumstances. If interested in people's satisfaction of their basic needs then the SCT is the model of choice. If the focus is more on hedonic well-being or indeed well-being based on people's sense of purpose or self-acceptance in life, then GSRF is the model of choice. Equally, if researchers are interested in both forms of well-being, the findings of this study strongly suggest using GSRF rather than SCT.

Another important practical implication revolves around the notion of relevant PPIs for the different forms of well-being. If the focus is to increase people's basic need satisfaction, then PPIs focussing on autonomy are more relevant. Hence, interventions such as the ones proposed by Sheldon, Kasser, Smith and Share (2002) on goal integration or the 'following your gut' exercise (Burton, 2008) are most suitable. If the focus is to improve people's hedonic well-being, their self-acceptance or increase their sense of purpose then PPIs focussing on developing more approach and less avoidance-driven goal-striving reasons are likely to be most beneficial. Here, the "Happiness through Goal Setting Training" (Ehrlich & Milston, 2022; Ehrlich & Milston, 2023) is a PPI which has been developed with this aim in mind. Ultimately, this also contributes to the effectiveness of the various PPIs as they can be used in a more target group-specific way resulting in a better person-activity fit (Lyubomirsky & Layous, 2013).

If applied in a workplace context, it is also important to consider under which circumstances it would be advisable to work on improving a person's autonomous goal-striving reasons and under which circumstances would it be advisable to work on improving a person's approaching goal-striving reasons. If a working environment is typically quite autonomous, where a lot of the focus is on task-inherent, intrinsic incentives and the culture or leadership style in the organisation is very democratic or even laissez-faire, then the PPI of helping people developing more autonomous goal motivation seem to be the method of choice. If the work environment is less autonomous, i.e. where there is a focus on task-inherent incentives but also a strong focus on extrinsic incentives such as social approval or promotions (Latham, 2012), where there are strong organisational constraints about which tasks to complete and how to execute these tasks (Fay & Frese, 2000), where there is a more directive leadership style (Locke & Latham, 2013), then the findings of this study suggest that a PPI which increases people's approach goal-striving reasons and reduces their

avoidance goal-striving reasons such as the Happiness through Goal Setting Training seems to be the PPI of choice.

5.1. Limitations

Despite the relevance of the findings presented above, the study also suffered from various limitations. One of which is that the study employed a cross-sectional research design. This means causality cannot be inferred. Hence, from a research design perspective, one could argue that the relationships found between the two goal models and well-being could also have been in the way that differences in well-being impacted people's quality of goal reasons. However, as mentioned on several occasions within the paper at hand, there is a substantial amount of empirical evidence that clearly shows that differences in goal reasons impact well-being (Ehrlich, 2018; Ehrlich & Bipp, 2016; Judge et al., 2005; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). Hence, it seems justified to assume that the discovered different relationships between both goal models and well-being are in line with the adjacent research that has shown conclusively that differences in goal-reasons influence people's well-being.

The findings are based on self-reported data, collected at one time from one source. This could have artificially inflated the findings by common method variance. However, the Harman's Single Factor Test (Harman, 1967) indicated that the likelihood of common method variance is very low (single factor only explained 17% of variance). Also, the reliability of the SCI measure was consistently lower compared to GSRI which might have also contributed to the fact that GSRI was found to be the better predictor of well-being when directly compared to SCI. However, when the comparison of only the approach and the

autonomous components of the two-goal models was made, reliability for the autonomous items increased to .74 (compared to .83 for the approach items) and similar patterns of relationships with well-being were obtained. Hence, it seems unlikely that the differences in internal reliability had a major impact on the findings presented. Finally, participation in the study was voluntary, therefore the findings might have been subjected to a self-selection bias.

5.2. Future research

The findings of this study also stipulate further research. Firstly, it might be advisable to replicate the findings in a (longitudinal) follow-up study to give other researchers more confidence in deciding which goal model to use and when. A particular focus might be on using a measure of self-concordance that goes beyond the typical four-item measure as this is likely to increase the internal reliability of SCI. It might also be important to include further eudaimonic outcome variables such as authenticity and vitality as these might be further variables where it would be interesting to see how SCI and GSRI SCI correlate with. This would further expand our knowledge about which goal reason model to use when predicting these two additional forms of eudaimonic well-being.

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[1] This follows a differentiation of approach and avoidance goals based on the work by (Ford & Nichols, 2019).

[2] Currently, EWB has been operationalised in at least 45 different ways using measures of at least 63 different constructs which has led to discrepant results and also making the findings of different studies difficult to compare (Martela & Sheldon, 2019). This also caused some confusion over the question what is EWB as opposed to indicators of EWB which this paper ignores to an extent and treat indicators for EWB as sufficiently valid representatives of EWB.

[3] Admittedly, theoretically approach and autonomous motivation are different (Ehrlich, 2012) – however in reality autonomous goals are quite often approaching (Judge et al., 2005).

[4] All in all, 171 cases were eliminated which is not unusual for a convenience sample. All deleted cases did fail to list all necessary three goals, i.e. were deleted if they did only list two or less goals.

[5] These two variables were also included to provide a better comparison with previous studies on the predictive power of the GSRI/SCI and well-being.

[6] See Table 3. The average beta weight for GSRI based on the three beta weights in question (.48,.41 and .42) is .43. The average beta weight for SCI is .27 based on the three beta weights of .30,.23 and .29.

[7] This is not confused with the corruption effect where individuals pursue goals for extrinsic reason which subsequently undermines their intrinsic motivation. Pleasure simply captures the fun factors beyond the task itself. This kind of “additional” fun is not seen as a means to an end.

The data that support the findings of this study are openly available in MASKED For REVIEW at <http://doi.org/10.24384/dgzp-wn97>

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