

Personal Goal Survey Development and Preliminary Trial in the Indian Community

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The paper describes the development and preliminary trials of a comprehensive tool for assessment of personal goals- the Personal Goal Survey (PEGOS), in an Indian setting. The review of existing measures, focus group discussions with expert psychologists and laypersons as well as interviews with community and clinical participants resulted in generation of the item pool. The initial version of PEGOS was administered to two independent community samples for examining the pattern of responses and testing its basic psychometric properties. Various scales of the PEGOS were found to have adequate internal consistency (ranging between 0.62 to 0.95) and convergent validity with scales of well-being (significant correlations ranging between 0.28 to 0.62). In addition to its utility in the context of well being research, the tool could also be used to rapidly and comprehensively identify goal-related problem areas & strengths in counseling settings. The directions for further research on PEGOS are highlighted.

Keywords: Personal goals, well being, goal assessment.

The notion of personal goals as a motivational construct has evoked much research interest in the past two decades. The primary emphasis of this line of research has been on examining the nature of personal goals and their relationship with mental health and well-being. This trend underscores the importance of methodologies and measures for assessment of goal variables.

Assessment of personal goals

Personal goals have been conceptualised and operationalised in terms of various constructs such as personal projects (Little, 1983), personal strivings (Emmons, 1986), and life tasks (Cantor et. al, 1987). The common feature amongst them is the emphasis on intentional activities as an aspect of personality.

Studies examining personal goals have employed two approaches in their assessment i.e. idiographic and nomothetic. Idiographic methods typically involve elicitation of personal

goals by the participants themselves, which are then categorized according to the domain of life they concern. Nomothetic approaches employ a set of predetermined goal statements to which the participants respond according to several appraisal dimensions such as importance, progress, accomplishment, stress and control beliefs. However, several researchers prefer to combine the two methods thus allowing them to examine goal content as well its appraisal. The most notable example of this approach is Personal Project Analysis (PPA) system (Little, 1983, 1999). In this methodology, medium-unit level personal goals are elicited. Medium-unit level refers to "personal projects" which are defined as a set of interrelated acts that extend over time and are intended to achieve or maintain a desired state. These projects are rated on several goal dimensions. Next, their linkage to other goals is examined in three contexts. Firstly, the concordance of the project with super-ordinate goals is examined (goal

hierarchy). Second, the extent to which other goals are instrumental or in conflict with working towards a project (congruence/conflict) is examined (cross-impact). Finally, the support or hindrance from others for the goal is examined. PPA has been extensively used as an assessment tool in research examining well-being, physical and psychological symptomatology (Little, 1999) as well in intervention studies on health promotion and maintenance (Salmela-Aro, Naatanen & Nurmi, 2004).

Other notable measures such as the Striving Assessment Scale (Emmons, 1986), Life Task Questionnaire (Cantor et al, 1987), Current Concerns Assessment (Klinger, 1977), Life Goals Inventory (Buhler et al, 1968), use a similar paradigm in assessing personal goals. More recently, goal content has been examined using Aspiration Index (Kasser & Ryan, 1996), based on Self-determination Theory (SDT, Deci and Ryan, 2000). The index includes goal items from 15 life goal categories or aspirations that are categorised as intrinsic and extrinsic goals. Intrinsic goals are construed as pursuits that are generally congruent with the psychological needs for relatedness, autonomy, and competence (Sheldon, Ryan, Deci and Kasser, 2004). In contrast, extrinsic *goals* are seen as primarily concerned with obtaining some reward or social praise, because they are typically a means to some other end or compensate for problems in need satisfaction (Deci and Ryan, 2000). The instrument has been used in research relating the content of people's goals to constructs such as mental health and risk behaviors.

In recent years, researchers have also tried to assess the specific motives for pursuing personal goals apart from examining the content of goals. Self-determination theory (Sheldon, Ryan, Deci and Kasser, 2004) distinguishes between two types of motives. 'Autonomy' refers to the extent to which people feel volitional in pursuing certain goals, while 'control' refers to feeling pressured to think,

feel and act in certain ways.

Yet another category of measures lays emphasis on examining goal-related processes. This involves tapping cognitive and affective self-regulatory components of goal pursuit. Karoly and Ruchman (1995) developed a measure, the Goal Systems Assessment Battery (GSAB), which focuses upon the individual's appraisals of four functional components of self-guidance: the directive function (goal value and self-efficacy), the regulatory function (self-monitoring and social comparison), the control function (planning, self-reward, and self-criticism), and the arousal function (positive and negative affect associated with goal pursuit). Maes and colleagues (2001) have created the Goals and Processes Inventory (GAPI), inspired by the Motivational Systems Theory of Ford (1992). The GAPI consists of 10 subscales that tap dimensions such as goal commitment, goal conflict and goal-related self-efficacy etc. Among measures of approach towards goal pursuit is the Linking Questionnaire (McIntosh & Martin, 1992), which examines the extent to which individuals' satisfaction depends on goal-related outcomes. The Goal Instability Scale (GIS, Robbins & Patton, 1985) is a 10 item self report instrument which measures extent of goal directedness in terms of difficulty in setting goals and keeping direction, maintaining drive to get work done, and initiating action. Initially developed for assessing career decidedness in students, it has subsequently been used to examine later-life adjustment in older populations such as retirees (Smith & Robbins, 1988; Robbins, Payne & Chartrand, 1990). Among others, the Tenacious Goal Pursuit and Flexible Goal Adjustment scales (Brandtstadter & Renner, 1990), each consisting of 15 items, measure tenacity or persistence in goal-oriented efforts and flexibility or the readiness to let go of blocked goals and to adjust aspirations to situational constraints. These have been employed in research on adjustment in old age

and some medical conditions. Other measures include Self-Regulation Scale (SRS, Schwarzer, Diehl & Schmitz, 1999) for measuring attentional and emotional regulation during goal pursuit; Action Control Scale (ACS-90, Kuhl, 1994) which assesses individual differences in action vs. state orientation, and Volitional Components Inventory (Kuhl & Fuhrmann, 2003) measuring 30 different functions of self regulation, and the Goal Realisation Process Questionnaire (Lapierre & Bouffard, 2001) that taps individual's ability to set, plan, and pursue personal goals.

Need for new tool

It is apparent that several measures exist for assessing various aspects of personal goals such as goal content and processes involved in goal pursuit. The scan of the available literature suggests that comparatively speaking, examination of goal contents, their linkages and appraisals of goals on certain dimensions such as outcome expectancies, perceived progress have been the subject of measurement much more than goal-related motives (reasons for goal pursuit). Similarly, process aspects of personal goals such as self-regulation and affective experiences are less frequently tapped comprehensively by the existing measures with the exception of GSAB and GAPI. Though goal content ('what' of goals) has been associated with well-being, goal pursuit motives and processes ('why' and 'how' goals are pursued) are also likely to be significant in determining an individual's ongoing adjustment during goal pursuit (for instance, McIntosh, Martin and Jones, 2001; Brandtstadter & Renner, 1990), and therefore warrant greater attention. Nomothetic approach in examining goal content has been more popular than an idiographic approach. Moreover, none of the existing tools specifically elicit perceived problems in goal-pursuit and goal-related coping, which can impact well-being. Most of the measures focus on a single aspect of goal pursuit such

as goal directedness or goal flexibility. A comprehensive assessment of personal goals would involve examining content of goals, motives related to goal pursuit as well as processes involved in goal pursuit, perceptions of common goal-related difficulties and goal-related coping behaviors. This paper describes the preliminary work in developing a comprehensive personal goal measure and highlights its potential utility in community and clinical settings.

Method

The study aimed at constructing a comprehensive personal goal measure for use in the context of a larger ongoing study. The paper describes the development and preliminary field trials of this measure. The tool development involved several steps as outlined below:

Step I: Identification of goal variables and framing guidelines for tool development: Goal variables discussed in the existing theoretical and empirical literature were identified apart from examining the content and structure of various goal measures. The following guidelines were evolved for use in the tool development process:

a) It was decided to adopt an a-theoretical stance in item generation. This was in view of the observation that goal psychology literature currently borrows from a variety of broader theoretical frameworks in the domains of personality and motivation etc.

b) On the basis of empirical literature review, it was planned to comprehensively cover a broad range of goal-related variables spanning content of goals, motives, processes, perceived problems and coping.

c) It was decided to develop a tool that would have potential utility for adults in clinical as well as community samples.

d) It was decided to make efforts to stay close to data generated from participants in order to develop items for the tool so as to ensure cultural appropriateness. As far as

possible, items would be constructed during the pilot phase by utilizing phrases and expressions used by respondents themselves rather than have purely researcher-generated items.

Step II: Planning focus groups and interviews: For item generation, the available research literature was supplemented with focus-group discussions (FGDs) and one-to-one interviews. FGDs were planned with two kinds of groups: 1) expert group comprising of psychologists practicing in clinical settings and 2) a group comprising of people from the community. In addition to the FGDs, a few individual interviews were planned to obtain greater depth of information through experiential accounts of participants with respect to their personal goals. Broad, open-ended probes for conducting the FGDs and interviews were constructed based on themes and issues raised in the reviewed literature.

Step II a: Obtaining expert observations on goal variables: Two focus group discussions (n=7 each) were conducted with experts. The major goal was to collate observations of professionals on the nature of issues related to personal goal pursuits (styles, difficulties, coping) spontaneously and explicitly brought up by clients seeking/referred for counseling as well as such themes that got uncovered during the process of counseling. The participants had a post graduate qualification in Clinical Psychology and were practicing in a clinical setting for at least two years.

Step II b: Exploring lay observations and beliefs about personal goals: In addition to the two FGDs with psychologists, it was decided to document a sample of observations and beliefs of laypersons regarding pursuit of personal goals. The aim of this exercise was a) to gather the participants' observations of the range of personal goals chosen by adults, individual differences in styles of goal pursuit, the goal-related difficulties people generally encounter and the range of coping strategies

they employ. b) To tap the participants' own beliefs regarding the nature of goals and methods of pursuing goals that they thought have a bearing on satisfaction and well-being in life. One focus group discussion was conducted with six adults from the community. In addition, one-to-one in-depth interviews were conducted with another set of eight individuals for the above purpose. Six of the interview participants were from the community (four males and two females) whereas another two were from a clinical setting being treated for panic disorder and alcohol dependence respectively. The community participants were chosen using snowball method. Convenience sampling was employed to recruit the two clinical cases. In addition to other themes, the interviews in the clinical setting focused especially on the goal-related difficulties as well as coping behaviours used. The FGDs and interviews were audio taped with the consent of the participants. This helped in obtaining the range of themes to be covered in the items as well as getting a sample of the language used by Indian adults while talking about personal goals and their pursuit.

Step III: Transcription and coding of the group discussions and interviews: The audiotapes of the three focus group discussions and eight in-depth interviews were transcribed. Preliminary coding of themes was done. The obtained themes could be categorized into 4 major categories: 1.Goal content (types of goals) and goal-related motives (reasons behind choice of goals) 2.Styles of goal pursuit or approach to goal pursuit 3.Goal-related difficulties 4.Goal-related coping strategies. The themes within each category were condensed into key phrases for items construction.

Step IV: Item construction: The key phrases from the above 4 categories were framed into items statements. As far as possible, phrases generated by participants themselves were utilized for the item

statements. The obtained coverage of items was examined vis a vis the range of goal variables earlier identified in the literature. A minority of goal variables (namely, importance, process enjoyment, self-monitoring) did not clearly emerge from the pilot data and items were written out by the researchers to tap the same. An effort was made to keep the items easy to understand and respond to. A pool of 194 items thus generated was organized into sections described later. Items in category of goal-pursuit style, difficulties and coping subsections were grouped into scales based on conceptual similarities. Finally, instructions were developed for each section of items. A 4-point Likert type response format was used for all items.

Step V: Content validation of PEGOS by experts: The version of the tool prepared through the above mentioned steps was given to three judges who were involved in training, research and clinical work with professional experience ranging between 3-7 years. The raters were provided with operational definitions of the relevant constructs (personal goal, style of goal pursuit, goal-related difficulties, goal-related coping strategies). Their opinion was sought regarding suitability of the items on the following dimensions: 1) comprehensibility/difficulty level of instructions, items and response format, 2) conceptual relevance and 3) cultural-appropriateness of items in the Indian context. All the raters judged most items as culturally appropriate, having low to moderate difficulty level, and conceptually related to the given construct definitions. Suggestions included reducing item complexity for a few items, modification of items showing social desirability bias, and dropping of a few items showing high conceptual overlap. The survey items were reviewed and changes were made based on the suggestions from the experts.

Step VI: Cognitive interviewing: The revised version of the survey was used in the form of in-depth cognitive interviews with three

respondents from the community. The goal of the interviews was to understand how items are interpreted, clarity of instructions, comprehensibility of items and the response format, and time taken to administer the questionnaire. The respondents were between 35-60 years of age, with fifteen years of formal education. Suggestions made by the participants included dropping similar items which appeared repetitive, making items less complex and easy to understand, and reducing the number of items to decrease respondent burden. At the end of this exercise, the survey was reviewed once again and the suggestions from respondents were incorporated in the survey items.

Step VII: First field trial of the survey: In this phase, the personal goal survey was administered on a sample of 30 gainfully employed adults from the community, between 25-60 years of age and with at least 15 years of formal education. The content of goals obtained were coded to pilot test the process of coding contents of self-generated goals. Pattern of item endorsements on all the items in various sections were examined to gauge applicability/relevance of items. Inter-correlations between items within scales were scanned to look for and revise potentially problematic items, if any.

Results

Results of the first field trial: Goal content coding: The goals generated by participants could be easily coded into content categories based on explicitly stated themes. Most often cited goal contents, across three top goals were material acquisition (25%), popularity/status (18%), self-improvement (18%), and other-centered (14%). Other less frequently cited categories were self-expression (11%), intimacy/affiliation (7%), community feeling (4%), and spiritual (4%). Two judges attempted to jointly code goals into intrinsic and extrinsic types, using the operational definitions mentioned earlier. Twenty percent of the self-generated goal contents could not

be classified into intrinsic and extrinsic goal types. The categorization of the remaining goals was a difficult task as it involved making inferences based on manifest content of reported goals.

A frequency analysis was done to examine pattern of endorsement of items in on goal-related difficulties. More than half the participants reported that 'competition from others' was a difficulty they rarely encountered. However the item was still applicable to 37% of participants "to some extent" and hence was retained. A frequency analysis of coping strategies reported by most people as 'rarely' used showed that 'quitting' a goal was least applicable with 80% marking it as a rarely used strategy.

Based on the inspection of item-endorsements and inter-correlations between items grouped together in the form of scales; one item on the personally controlled scale in the motives section and one in the coping section ('waiting') were modified. In the style of goal pursuit section, a few items required modification to reduce item complexity/ambiguity, whereas four items were dropped from positive affective experiences, flexibility and commitment scales. A new item was written for thought vs. action focus. In the goal-related difficulties section, frequency ratings of goal-related difficulties were highly correlated with ratings of distress related to difficulties ($r = 0.86, p < 0.01$). Due to this, the distress ratings were dropped from the revised survey to reduce the respondent burden. All difficulty items were retained. In the coping section, the ratings on coping-utility were dropped to keep the respondent burden low in view of the observation that these did not provide sufficiently new information that would justify their separate assessment. In place of separate ratings, a single global item for rating perceptions of overall goal-related coping effectiveness was added. Based on the feedback from participants, an open-ended item was added to elicit perceived strengths

vis a vis goal pursuit. This was meant to not just capture awareness of strengths but also to give a closure to the survey with a positive tone.

Step VIII: Second field trial: The final revised version of the Personal Goal Survey (PEGOS) was administered on a fresh sample of 51 working adults (men and women), 35-60 years with at least 15 years of formal education, from various occupations, between. All the participants had completed at least 15 years of education. Two measures of subjective well-being, namely Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) and Positive and Negative Affect Scale (PANAS) (Watson, Clark & Tellegen, 1988; Revised by Barrett and Russell, 1988) were used in addition to the PEGOS to obtain data on correlations of goal variables with well-being for convergent validation of PEGOS.

Results of the second field trial:

Content of goals: The goals generated by the participants were analysed and categorized based on their content. The most often cited among the top three goals were from the categories of family-centered or parenting-related goals (21%), followed by career focused goals (20%), health related goals (17%), social/community related goals (13%). Other frequently cited goals were material and financial acquisition related goals (12%) and self-improvement/personal growth related goals (11%). Goals related to aspirations for fame/status and spiritual pursuits were cited less frequently (4% and 1% respectively).

Goals generated by participants were also categorized based on the level of specificity or abstraction as indicated in the way they were reported i.e. whether they were reported in concrete and specific terms or global and abstract terms. Most of the cited goals were adjudged concrete (77.8%) compared to abstract (22.2%) by two

independent raters. Inter-rater agreement was complete. Though, an attempt was made to categorise goals using the intrinsic-extrinsic distinction, as in the first trial, it was difficult. It appeared that a few of the goals, as reported, could be pursued to fulfill more than one purpose and could not be clearly distinguished as only intrinsic or extrinsic based on the reported nature of the goals.

Pattern of item endorsements on goal difficulties and goal-related coping:

A frequency analysis was done to examine the pattern of endorsement of items

on the Difficulties scale. 'Not having strong attachment to goal' or 'not feeling sense of control over one's goals' were reported as a "rarely" encountered difficulty by three fourth of the participants each. Nearly twenty eight percent of the participants endorsed 'not having enough time' and 'thinking too much before coming to a decision' as difficulties often/very often encountered. Among coping strategies reported as rarely used, most people (75%) reported 'quitting' as rarely used. Among strategies reported as used most often, 86.3% reported the use of 'correct my mistake' as a coping method.

Table 1: Descriptive statistics for PEGOS scales (n=51)

a. Goal-related motives	Min-Max possible	Min-Max obtained	Mean	SD	α
Personal autonomous (2)*	2-8	3-8	6.27	1.55	0.77
Personal controlled (2)	2-8	2-8	5.09	1.86	0.69
Relational autonomous (2)	2-8	2-8	4.33	1.94	0.51
Relational controlled (2)	2-8	2-8	3.28	1.72	0.76
b. Styles of goal pursuit					
Investment (4)	3-12	6-12	10.12	1.68	0.69
Autonomy (3)	3-12	4-12	9.71	2.13	0.72
Optimistic appraisal (4)	4-16	8-16	12.88	2.10	0.66
Positive experiences (4)	4-16	6-16	12.47	2.27	0.72
Self monitoring (6)	5-20	8-20	14.96	3.01	0.72
Flexibility (3)	2-8	4-8	6.39	1.22	0.62
Self reinforcement (4)	3-12	5-12	9.09	1.66	0.68
Commitment (4)	2-8	3-8	6.14	1.44	0.66
Action focus (3)	2-8	2-8	6.25	1.49	0.73
c. Goal-related difficulties					
Total scale	41-164	41-122	65.27	17.40	0.95
d. Coping strategies					
Motivation enhancement (9)	8-32	8-25	25.27	3.38	0.79
Emotion management (8)	9-36	12-36	15.75	4.87	0.58
Action orientation (7)	7-28	11-27	19.75	3.84	0.76

* Figures in the parentheses refer to number of items.

Internal consistency of scales: Internal consistencies of the various scales were examined. The internal consistency coefficients for all the four motives scales, nine style scales (except realistic goal setting), goal-related difficulties scale and motivation management and action oriented coping scales were fairly high ranging between 0.62 and 0.95 (see Table-1). The emotion

management scale had somewhat low internal consistency coefficient, the alpha value being slightly less than 0.60. The items categorised under the scale of realistic goal setting showed low internal consistency. On examining the content, the items appeared to be rather complex and assess conceptually somewhat different aspects and it was decided to retain only one of these as a stand-alone items. The stand-alone item of single goal focus was again retained without change.

Table 2: Description of goal-pursuit style and coping sections of PEGOS

Style section	Definition
Investment	Getting highly involved or engrossed while pursuing a personal goal
Autonomy	Attaching importance to being autonomous in choice and ways of pursuing personal goals
Optimistic appraisal	Perceiving success as likely and experiencing a sense of making progress towards one's goals
Positive affective experience	Experiencing positive affect in the process of pursuing goals irrespective of final outcomes
Self monitoring	Keeping track of one's behaviours and emotions related to pursuit of personal goals
Flexibility	Being open to different ways of working towards ones' goals
Self reinforcement	Appreciating small gains while working towards one's goal
Commitment	Being serious and dedicated towards one's goal
Thought vs. action focus	Emphasis on doing things as opposed to merely reflecting about one's goals
Single goal pursuit	Persisting with a single major goal at a time as opposed to working on more than one major goal on a parallel basis
Realistic goal setting	Setting goals keeping in view one's abilities and constraints
Coping Section	Definition
Motivation enhancement	Enhancing motivation to sustain goal pursuits
Emotion management	Managing negative affect / reducing distress that may be generated during goal pursuits
Action orientation	Taking concrete steps in response to difficulties
Distraction	Taking a temporary break from the problem
Rumination	Worrying about the problem for long
Religious coping	Coping by religious means
Waiting	Waiting for the problem to resolve
Wishful thinking	Wishing for the problem to go away

The final version of the Personal Goal Survey (see Table 2) consisted of 3 sections as described below.

Section I: In this section, participants are first introduced to the concept of a personal goal with the help of examples. They are then asked to list three most important current goals that they are likely to be involved in for at least 6 months to a year. This time frame was chosen to elicit currently important medium range goals and to distinguish them from daily activities and long term desires. They are also asked to rank them in order of importance. Further, they are asked to rate their most important goal on a number of goal dimensions such as progress, difficulty etc. The dimensions were chosen based on earlier studies that have shown their association with

well-being (Emmons, 1986; Rao & Mehrotra, 2006). Next, they are required to rate the three self-generated goals with respect to different motives. These items were adapted from the motives measures used in studies examining association between motives for goal pursuit and well-being (Sheldon, Ryan, Deci, & Kasser, 2004; Gore and Cross, 2006). The motives section included eight items to be rated for each of the three goals. The eight items assess 4 kinds of motives namely: personally autonomous, personally controlled, relationally autonomous, and relationally controlled, each of which are measured by two items. Personal and relational goals refer to goals pursued for individual and relational reasons respectively. Each of these can be pursued in an autonomous or controlled

fashion. Autonomous reasons refer to pursuing goals because one wishes to/enjoys the same, while controlled refers to pursuing goals because one perceives it as an implicit or explicit demand rather than a purely volitional act.

Section II: This comprises of three subsections. The first set of items relates to style of pursuing goals (for e.g. 'whatever goal I have at a given time, I work very hard at it'). Each item is rated on a four-point scale from 'Not at all like me' to 'mostly like me'. Although people may adopt different approaches while working on different kinds of goals, it is expected that there are certain commonalities across goals/situations within-persons and these can be used to assess individual differences in ways of goal pursuit patterns/styles. The style related items in PEGOS attempt to capture respondents' perceptions of how they 'typically/generally' pursue important goals in their lives. The next subsection taps perceived occurrence of goal-related difficulties (for e.g. 'losing interest in working on the goal after some time'). These items are rated in terms of frequency of occurrence ('Rarely' to 'Very often', a four-point scale) as well as distress ('Doesn't bother me'/'bothers me a lot'). The third subsection of items taps goal-related coping strategies (for e.g. 'When I face problems while working on a personal goal, I remind myself that I can achieve the goal.'). The coping items are rated in terms of frequency ('Rarely' to 'Very often', a four-point scale) as well as utility ('not useful' to 'very useful' on a three point scale). The popular classification of coping into problem focused, emotion focused and appraisal focused appeared inadequate to capture processes related to coping with goal-related difficulties. Three specific coping categories emerged through inspection of coping themes in the pilot data namely motivation enhancement, emotion-management and action-orientation. In addition to the above, five stand-alone items tapping distraction, rumination, religious coping, waiting, and

wishful thinking for coping with goal-related difficulties were also written to comprehensively capture all the coping themes evident in the pilot data.

Section III: This section comprises of an open-ended question to elicit life goal/s of the participant i.e. an overall long-term goal that they want to work towards in life. They are asked to describe this goal as well as how they have been progressing towards it. This item is included to assess the way participants think about their long-term pursuits. As previous literature has shown that concordance between current pursuits and long-term goals are associated with well-being, the perceived connectedness/link between these two is assessed through a single item on a 10-point scale.

Observations on correlations among motives scales:

The inter-correlations between the motive scales were examined for each of the three generated goals. Only figures for the top goal are described here. Personally autonomous and personally controlled scales were uncorrelated whereas relationally autonomous scale scores correlated with relationally controlled scale scores ($r=0.58$, $p<0.01$). The relational autonomous and controlled scales were not only highly correlated with each other, these were also found to correlate with personally controlled scale ($r=0.51$ and $r=0.44$; $p<0.01$ respectively). However these were uncorrelated with personal autonomous scale.

Goal variables and subjective well-being: As far as the content of goals is concerned, it was found that participants who reported a spiritual or a social/community related goal among one's three most important goals ($n=17$) also reported higher life satisfaction than the rest ($t= -2.26$, $p< 0.01$). Similarly, those having at least one of the top three goals that was rated as abstract ($n=23$) reported greater life satisfaction than the rest ($t= -2.05$, $p< 0.01$).

Motives and well-being: On examining the relationship between motives and well-being, it was seen that the strength of personal autonomous motive for the top goal had modest positive correlation with life

satisfaction ($r=0.32$, $p<0.05$) and positive affect ($r=0.31$, $p<0.05$). However, the scores on personal controlled and the two relational motives for the top goal did not significantly correlate with indices of well-being.

Table 3: Correlations between goal pursuit variables and well-being indices

Goal pursuit variables	Negative Affect	Positive Affect	Life satisfaction
a. Style of goal pursuit			
Investment	-.11	.49**	.20
Autonomy	-.31**	.51**	.39**
Optimistic appraisal	-.34**	.49**	.46**
Positive experiences	-.18	.48**	.28**
Self monitoring	-.41**	.47**	.40**
Flexibility	-.37**	.23	.42**
Self reinforcement	-.25*	.29*	.04
Commitment	-.45**	.25	.60**
Action focus	-.30*	.29*	.48**
Realistic goal setting	-.13	.37**	.16
Single goal focus	.03	-.06	-.10
b. Difficulties	.70**	-.30*	-.50**
c. Coping			
Motivation enhancement	-0.11	0.34*	0.14
Emotion management	.38**	.056	-.19
Action orientation	-.06	.30*	.19
Distraction	0.09	0.01	0.07
Rumination	.23	-.16	-.43**
Praying	.23	.04	-.13
Just waiting	.13	-.14	.02
Wishful thinking	.35	-.09	-.02
d. Overall Perceived coping effectiveness	-.38**	.01	.43**
e. Perceived concordance between short term and long term goals	-.23	.050	.26

** $p<0.01$ * $p<0.05$

Style and well-being: All the style scales except flexibility, correlated with positive affect (see Table 3). Further, all style scales except investment and positive experiences during goal pursuit, correlated with negative affect. Similarly, all style scales except investment, correlated with life satisfaction.

Goal related difficulties, coping and well being: Scores on goal-related difficulty scale were strongly, positively correlated with negative affect but showed moderate to modest negative correlations with life satisfaction and positive affect. Among coping

scales, high motivation enhancement and action orientation coping scores were associated with high positive affect whereas high emotion management coping was associated with high negative affect. Rumination coping item correlated significantly with life satisfaction in a negative direction. Further, higher ratings on global perceived coping effectiveness were associated with lower negative affect and greater life satisfaction. (See Table 3)

Step IX: Exploring utility in therapeutic assessment:: The utility of PEGOS items as a

set of probes for rapid and comprehensive identification of problematic areas and strengths in clients seeking/referred for counseling was explored through interviews with two clients who brought up personal goal-related issues in presenting complaints. The first participant was a thirty one year old male on treatment for panic disorder and was referred for counseling regarding dissatisfaction and worry about his career and future. The second participant was a twenty-year-old young man who was reportedly performing poorly in his current academic course. In both the cases, the PEGOS could be used as a template to rapidly explore the nature of problems and the use of items as probes yielded a comprehensive picture of issues that could be taken up for providing a feedback to the clients, their significant others and to the referring professional as well as for drawing up an intervention plan. Problematic goal styles identified in the first case were low flexibility in the method of goal pursuit, difficulty in balancing goals in different life domains, difficulty in disengaging from certain goals when needed and failures in use of adequate emotion management coping strategies to deal with distress. In the second case, lack of focus and ambivalence resulting in low commitment to current pursuits, high need for personal autonomy in goal pursuits and difficulties in self-regulation (especially boredom management) emerged as prominent areas for discussion.

Discussion

The Personal Goal Survey (PEGOS) is designed as a comprehensive tool for assessment of personal-goal variables. It combines idiographic and nomothetic approaches to assessment. It includes sections that elicit three most important goals of the respondents that are then self rated on certain dimensions, motives related to their pursuit, general styles of goal pursuit, perception of goal-related difficulties and coping. Two preliminary trials indicate

satisfactory, reader friendly structure; with fair to high item relevance and internal consistency of various scales, scores on which are correlated in theoretically meaningful ways with indices of well-being. The tool also appears to have utility as a template for rapid interview-based therapeutic assessment in counseling settings.

Professional raters could easily categorise goals generated by the participants in two ways:(i) based on explicit theme/domain they referred to, and (ii) according to level of specificity or abstraction. Having an abstract goal as one of the top three goals was associated with higher life satisfaction. In another study, abstract goals were positively associated with psychological distress (Emmons, 1992). The methodology and the nature of outcome measures used may partly explain the difference in the findings. Further research is needed to substantiate the current study findings and explore the mediators of the relationship between nature of goals (abstract/concrete) and life satisfaction. The study results also highlight that extrinsic/intrinsic typology (Deci & Ryan, 2000) is difficult to apply for PEGOS in which goals are reported by the participants themselves rather than presented by the researcher for rating. The difficulty seems to arise in instances when goals are reported in ambiguous terms or when some goals, as stated, may be arguably pursued for meeting intrinsic as well as extrinsic needs. If a classification along this dimension were desired in the context of PEGOS, it would be best possible with a follow-up interview. With respect to goal-related motives, personally autonomous and personally controlled motives emerged as clearly distinct in keeping with the pattern of findings in another study (Deci & Ryan, 2000). However, the autonomous-controlled distinction was not significant for relational motives. Moreover, relational motives were associated with personally controlled motives. This suggests that in a

relational context, the participants reported reasons for pursuing goals as less autonomous. Autonomous and controlled motivations for pursuing relational goals (Gore & Cross, 2006), especially in Asian cultures, have been researched infrequently (e.g. Stewart, Zaman, & Dar, 2006) and require further examination. Each style scale showed an association with at least two of the three indices of well-being i.e. positive affect, negative affect and life satisfaction, suggesting that stable patterns of goal pursuit may have implications for well-being.

Measures assessing goal-related difficulties have been limited in previous literature. The present study has attempted to examine various internal and external difficulties experienced during goal pursuit, from the respondent's view as well as coping methods used to deal with the same.

On the whole, the findings demonstrate the utility of the personal goal survey as a structured instrument with promising psychometric properties (internal consistency ranging between 0.62 and 0.95; as well as moderate to high correlations with indices with well-being, ranging between 0.28 to 0.62, indicating adequate convergent validity). In well-being research, it may be utilized for obtaining both idiographic and nomothetic information by a comprehensive assessment of the structure and processes in personal goal pursuit. The instrument also holds promise as a semi-structured interview tool for use in a counseling setting for feedback and intervention planning.

The measure is ready for use with larger samples with representation of various age and gender groups for further substantiating its psychometric properties and developing normative data for profiling of scores on various goal variables. Also, further work on different methods of classifying and summarising respondent generated-goal contents may help in reflecting the full spectrum of reported goals in adulthood.

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