Helping People Navigate their Careers through Problem Solving

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Vocational Designing and Career Counseling

Challenges and New Horizons

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Today's Symposium:

- I. Overview of the PSI: 30 years of research and practice

- II. The Role of Problem Solving Appraisal in Career Planning

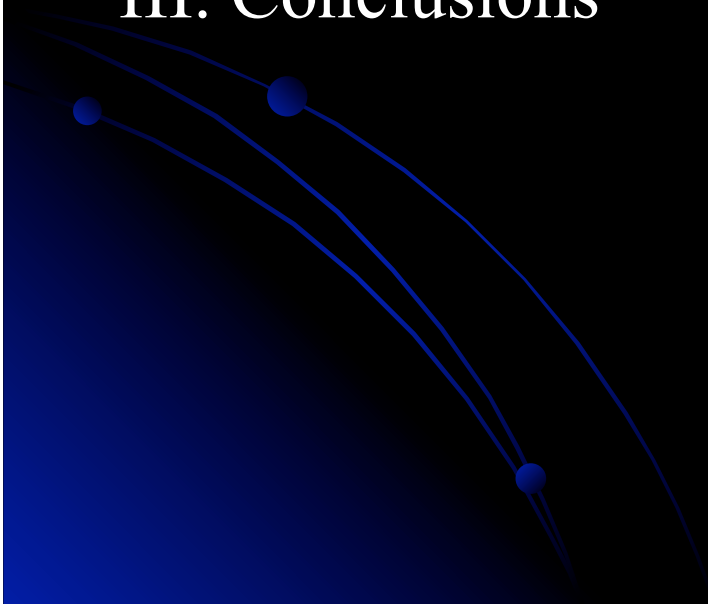- III. Problem Solving Training

I. Overview of the Problem Solving Inventory

I. Problem Solving Inventory: What is it?

II. Overview of Empirical Knowledge Bases
- Illustration: Psychological Adjustment

III. Conclusions

Problem Solving Inventory: What is it?

If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning.

~ Mahatma Gandhi ~
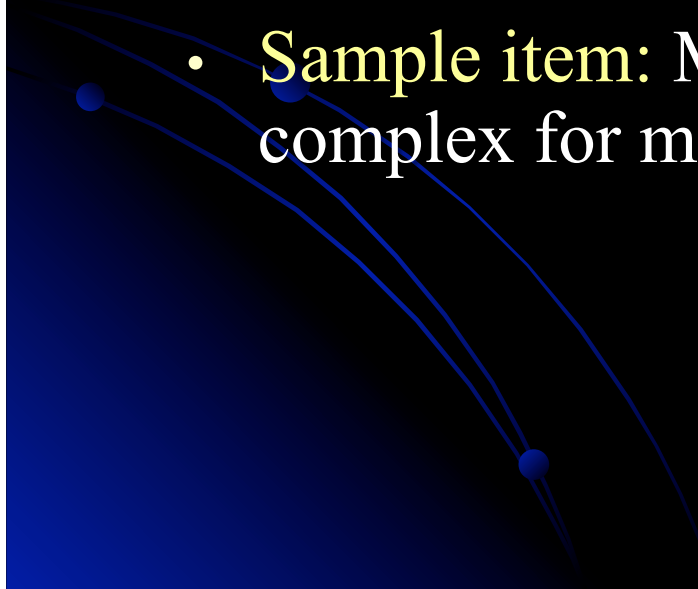
The Problem Solving Inventory (PSI)

- Based on their experience, people develop general beliefs and evaluations about themselves as problem solvers.

- PSI is a global appraisal of how people assess their problem solving capabilities, their awareness and evaluation of their problem solving skills and style.

  (Heppner, 1988; Heppner, Witty, & Dixon, 2004).

- PSI Total Score and three factors.

- Low scores are "good" (well, mostly good)

  (See Heppner, et al., 2004; Larson & Heppner, 1989; Larson, et a., 1995)

The PSI had been translated into at least 15 languages including Mandarin, Japanese, Cantonese, and most recently Malaysian, French, Spanish, Korean and Arabic.

ฉันรักเธอ

แล้วเจอกัน

ด้วยความปรารถนาดี

ขอแสดงความนับถือ

كل عام وأنتم بخير

شكراً

أطيب التمنيات

Merhaba

En iyi dileklerimle

Mutlu Yıllar

Factor 1

Problem Solving Confidence (11 items, alpha = .85):

- A belief in oneself to effectively cope with difficult situations, a rather global problem-solving self-efficacy.

- Sample item: Many problems I face are too complex for me to solve.

Factor 2

Approach-Avoidance Style (16 items, alpha = .84):

- A general tendency to approach or avoid coping activities.

- Sample item: When confronted with a problem, I consistently examine my feelings to find out what is going on in a problem situation.

Factor 3

Personal or Emotional Control (5 items, alpha = .72):

- A belief that one is in control of his/her emotions and behaviors.

- Sample item: Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.

II. Big Picture: Overview of Research

- Strong empirical support from 130 investigations.

- Factor structure replicated across samples/cultures.

- Strongly related to psychological adjustment.

- Related to physical health indices.

- Strongly related to problem-focused coping.

- Strongly related to help seeking, career planning and vocational adjustment.

- Patterns in cognitive, affective , and behavioral domains suggest more effective problem solving….but not always.

(See Heppner, Witty, & Dixon, 2004)

Illustration: Psychological Adjustment

Big Picture: Pervasive link across populations/cultures between PSI and distress.

- Depression (35 studies)
- Hopelessness and Suicidal Behavior (12 studies)
- Eating Disorders (3 studies)
- General Psychological and Social Adjustment (24 studies)
- Anxiety (12 studies)
- Gender-related variables. Instrumentality (5 studies)
- Alcohol Use/Abuse (5 studies)
- Parental Associations (6 studies)
- Childhood Traumas (4 studies)

In short, PSI is associated with a range of psychological adjustment indices.
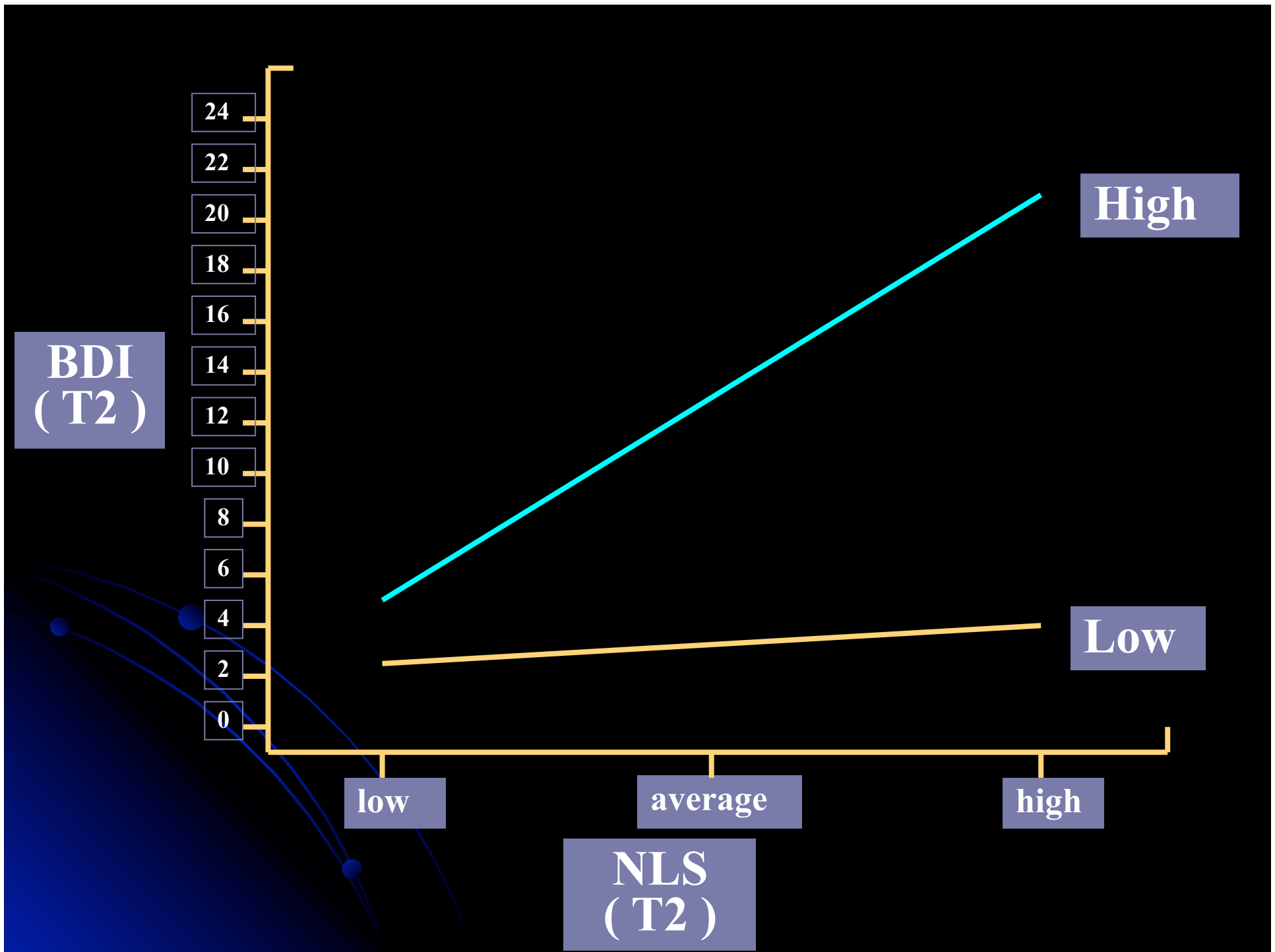
Effective vs. Ineffective Problem Solvers

Perceived Ineffective Problem Solvers:

- Lack Confidence, lack follow through, quickly give up
- Ability is the means by which problems can be solved
- Less motivated
- Avoid dealing with their problems
- Act on impulse
- Have trouble making decisions
- Tend to use emotion-focused coping
- Lack awareness and less utilization of helping resources.

Heppner, Witty, & Dixon (2004)

III. Conclusions

- We now understand several dimensions of human problem solving that help us predict a greater amount of variance in a host of psychological, physical, career indices, as well as counseling outcomes.

- In addition, problem solving mediates and moderates the relations between stress and psychological adjustment.

- Problem solving/coping can also help us understand:
    (a) how clients cope with their problems,
    (b) how clients might respond to counseling,
    (c) client outcomes of counseling, and
    (d) appropriate counseling interventions to match the clients'
        coping styles.

- In short, we can do a better job helping people!

2. We have overlooked or ignored the cultural context in applied problem solving and coping.

Examples:

- tendency to assume a monocultural context
- overlooked differing cultural values
- assume universality of findings

Accumulated knowledge bases have oversimplified and homogenized the coping process through a color-blind approach.

3. The domain of cultural sensitive applied problem solving and coping is largely unexplored.

The cultural context affects all aspects of applied problem solving and coping.

Cultural norms affect:
- perceptions of problems and stressors
- allowable coping strategies
- acceptable solutions
- outcome indicators (e.g., psychological adjustment)

4. Culturally sensitive research in many cultures will expand the depth and richness of our knowledge bases and our theoretical models of how people cope around the world, as well as how to train diverse groups of people to me more effective problem solvers.

- Although US scholars have added greatly to the existing knowledge bases….they are but small pieces to the vast global mosaic of applied problem solving and coping.

- Studying the cultural contexts will make us better psychologists….better scholars, teachers, mentors, therapists, consultants, etc….and better people.

Career Planning and the PSI

- Career decision making has been conceptualized as a specific instance of problem solving.

- There have been 20 studies that have examined the role of problem solving and career development.

Major findings include:

- The better the problem solving:
  - the more career decidedness
  - the less reported stress
  - the more rational the career decision making
  - the more certainty in approaching career related problems
  - the more clarity about who they are and what they   want from a career
  - the less job burnout

But how does problem solving appraisal prospectively predict career counseling process and outcome?

- Examined 151 adult clients who came for career counseling
- Counselors were masters and doctoral level students

Measures

- Client Attribute Measure: Problem Solving Inventory
- Process Measure: Working Alliance Inventory
- Career Adjustment Measures: Career Decision Profile, My Vocational Identity Career Transitions Inventory
- Psychological Adjustment Measures: Goal Instability Scale, Global Severity Index of the Brief Symptom Inventory

- Domain sensitive holistic approach to career counseling that we describe in our book was used in the sessions.
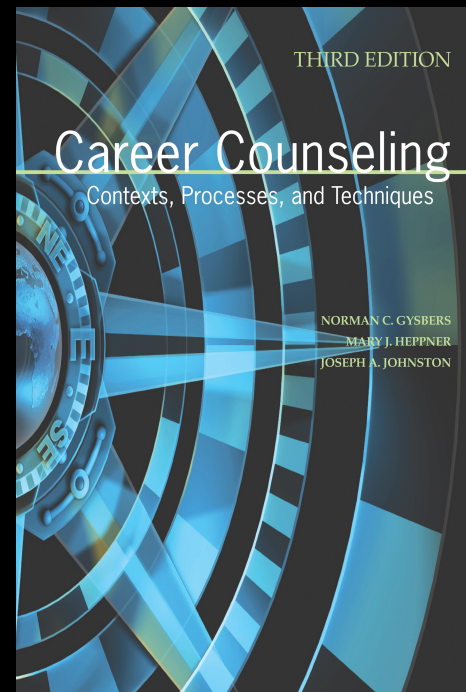
Findings:

- Clients pre-counseling problem solving appraisal scores predicted post counseling: (a) career and psychological outcomes and (b) career decidedness even after controlling for client' pre-decidedness scores.

DECISION-MAKING

- Clients who improved their problem solving appraisal in counseling were more likely to have more positive career resources to use in their transitions as well as greater goal directedness.

- Clients changes in problem solving appraisal also related to changes in the working alliance over time; the more positive the change in appraisal the more positive the working alliance.

- These (on average) 5 sessions of career counseling improved problem solving appraisal at a similar levels to 8 session problem solving training workshops.

Examples of how problem solving appraisal impacts daily life: *Pauline*

- Just laid off from high tech firm
- Now unemployed with little worry
- Conceptualizes job loss as an opportunity to pursue something better
- Active in seeking other employment
- Problem solving suggested confidence, approach behaviors, and feelings of control

Examples of how problem solving appraisal impacts daily life: **Tom**

- Moved to new city for wife's job

- Has had difficulty finding work

- Drank and slept more than usual

- Reported feeling depressed

- Applied for less skilled jobs than his qualifications

- Problem solving style indicated a lack of confidence, avoidant behaviors and feelings of being out of control

"the integration of prevention and problem-solving appraisal appears to be ideal for activist counseling psychologists committed to primary prevention. From my perspective, the PSI holds great potential as a preventive tool for fostering proactive problem solving ...and could be used in primary, secondary and tertiary prevention interventions" (p.445).

O'Neil (2004)

Problems of Italian adolescents

- 15-to-20% of 15- to 19-year-old adolescents experience poor problem solving abilities, poor self-efficacy beliefs, poor social skills, and tend to use not highly effective coping strategies (Soresi, Nota, & Ferrari, 2005).

- alcohol consumption, cigarette smoking, soft drug use, inadequate eating habits, antisocial behavior, and reduced school attendance (Soresi, Nota, & Ferrari, 2005; Bonino, Cattelino, & Ciairano, 2005).

- At risk behaviours are higher in students that attend vocational schools, medium in students that attend technical school or teachers' training schools and lower in students that attend Lycee (Berti et al., 2008).

DIFFICULTIES? NO PROBLEM, I CAN SOLVE THEM

- *1° DU youth's worries*
- *2° DU the problem solving: the analysis of a problem*
- *3° DU transforming problems in objectives*
- *4° DU career objectives*
- *5° DU personalized meeting*
- *6° DU how to find more options*
- *7° DU how to decide*
- *8° DU Aggressive, assertive and passive behaviors*
- *9° DU How to express wishes*
- *10° DU How to get others' help and collaboration: the social contract*
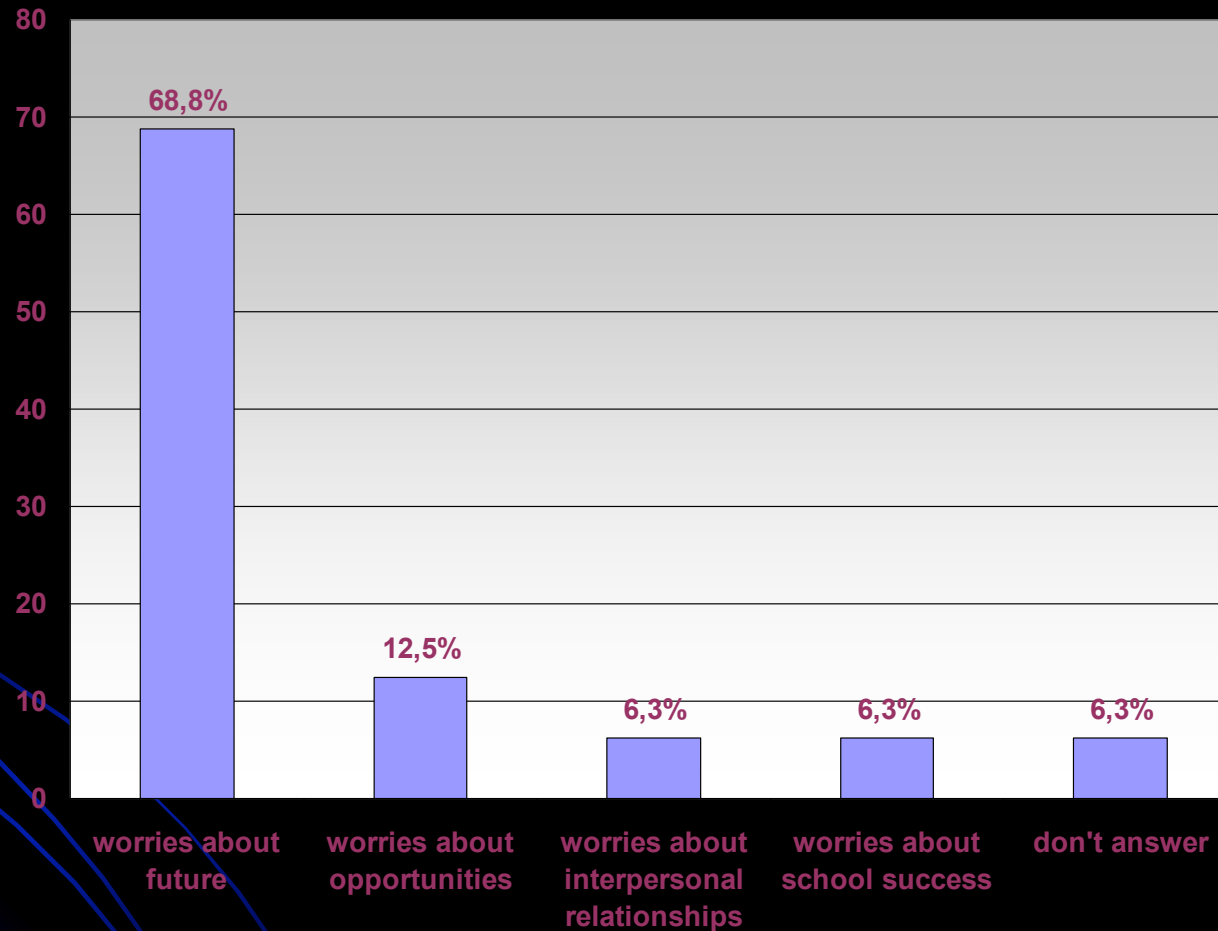
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Your worries

QUESTIONS FOR DEFINING A PROBLEM

1. Is this a problem for me?

•Am I worry about that?

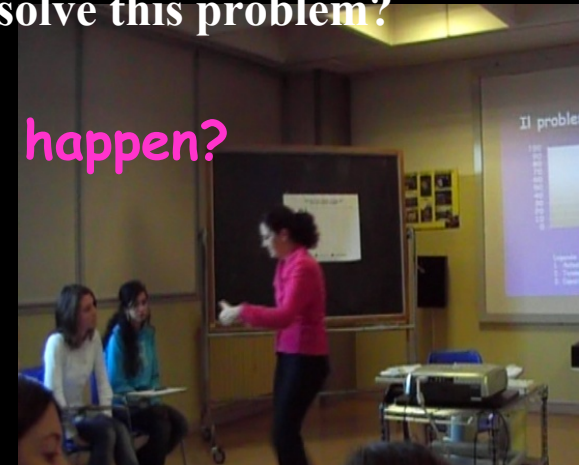•Do I feel discomfort?

•Do I want to solve it?

2. Do I know how to solve it?

•Is the first time I have this problem?

3. Is it my problem?

- Do I need skills I don't have?
- Is solving this problem important for me?
- Is it supposed I can solve this problem?

4. If I don't solve the problem, what will happen?

1°UD

1. Individuare una situazione problemica e scrivere almeno due motivi per cui può rappresentare un problema.

PROBLEMA: Non so cosa fare nella mia vita: se andare all'università o trovare un lavoro. Nell'eventualità in cui dovessi andare all'università non so nemmeno che facoltà scegliere.

1) Questa situazione mi crea disagio o preoccupazione?
– Sì, molta preoccupazione, mi causa ansia e nervosismo

2) È la prima volta che mi capita una situazione come questo?
– È la prima volta che devo davvero scegliere il mio futuro, ma sono anni che penso a questo problema

3) È un mio problema?
– Nessuno in casa mia deciderà per me, nemmeno le altre persone hanno individuato cosa posso fare da grande. È UN MIO PROBLEMA

4) Cosa succede se non lo risolvo?
– Sento che non avrò un bel futuro

Functional analysis

what people do or say

What the person think about him/her-self, others or situation

| where	when	With whom	Antecedents - overt	Antecedents - covert	What you do or say – behaviour	consequences Overt	consequences covert
At school, in the room	During the english lesson of yesterday	Teacher and peers	She is giving us the results of the test, she give me my test, she say "your test"	I'm thinking "ooooh I hope, I hope, I hope …."	I say "thanks" and I read the grade: "not sufficient", and I say "noooooo"	The teacher watch me and doesn't say anything	Inside myself I say: "I know it, I'm not able"

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Compiti per casa UD2

1. Leggere il materiale
2. Fare l'analisi funzionale di una situazione accaduta nel corso della settimana

Quando	dove	in presenza di chi	antecedenti ambientali	antecedenti covert	cosa dici o fai	conseguenze overt	conseguenze covert
DURANTE L'ORA DI MATEMATICA	A SCUOLA IN CLASSE	DEI COMPAGNI E DELLA PROF.	STA CONSEGNANDO I COMPITI IN CLASSE E MI CONSEGNA IL MIO E VEDO! 4½	PENSO: UFFI, MA COME È POSSIBILE DOPO TUTTO QUELL'IMPEGNO?	RIMANGO IN SILENZIO E GUARDO IL MIO COMPITO IN SILENZIO	LA PROF MI DICE DI NON PREOCCUPARMI MICA FACCIO IN TEMPO A RECUPERARE	PENSO: PERÒ MI ERO IMPEGNATA MOLTO E NON È SERVITO A NULLA PURTROPPO! SPERIAMO DI RECUPERARE.
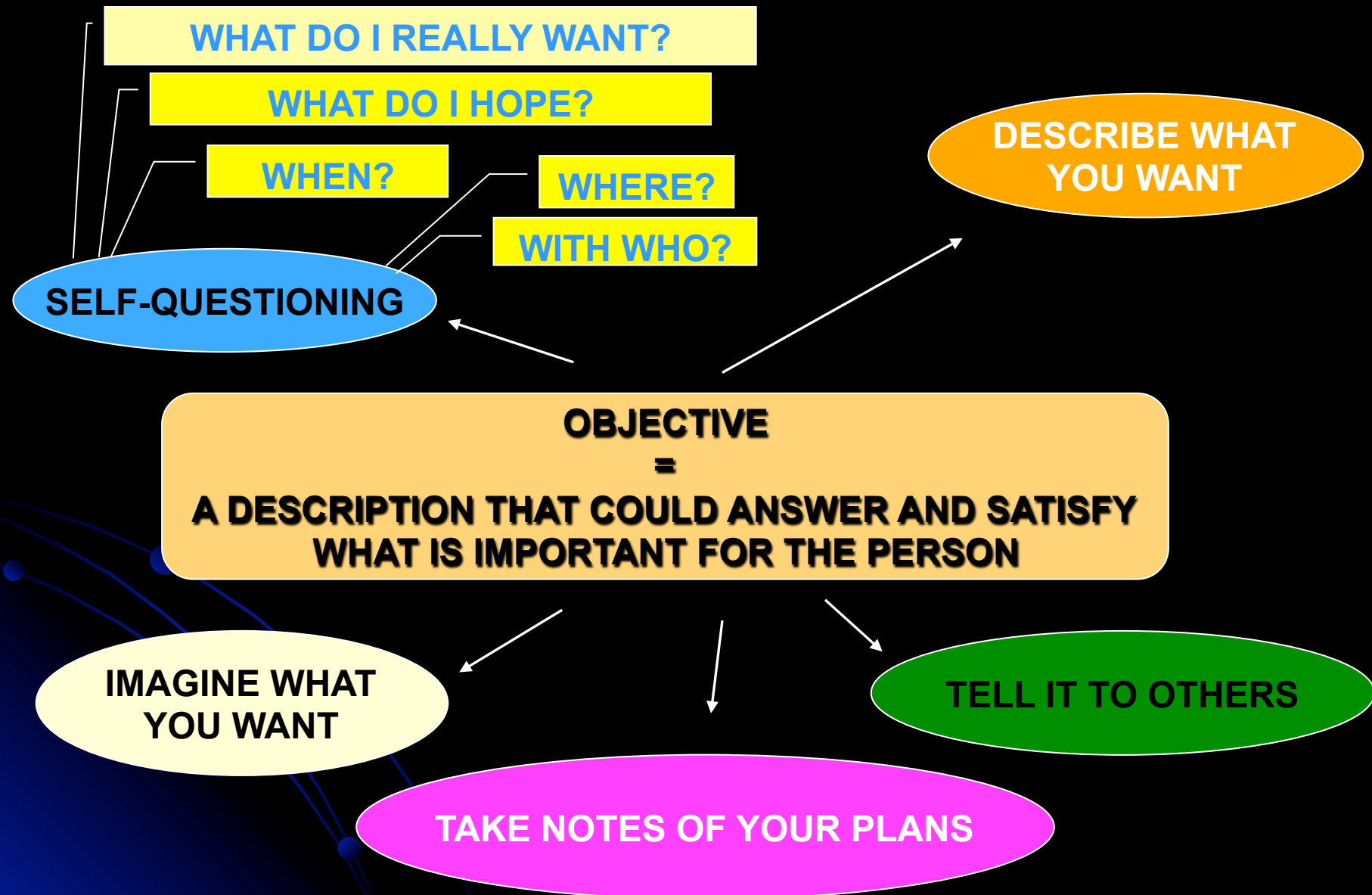
1. As concerns all these things, what do you think about what we have done so far?

2. Which meetings did you like best? Why?

3. Among all the things we have done so far which do you think is the most important? Why?

4. Have you happened to meet with difficulties recently? Could you describe the latest one and tell us how you coped with it?

5. Which of the things we dealt with in the course did you think useful?

6. Have you talked with anybody about this course?

7. What did you say to one another? Is there anything you would like to discuss in the next meetings?

1. As concerns all these things, what do you think about what we have done so far?

Categories	Examples	F	%
Importance	"it is important" "we learned new and important things"		
Interest	"I'm interested in it" "I like it, It is interesting"	20	35.1
Strategies	"I learned to think about the problem" "I focus on the problem now" "It is useful to simplify the situation" "thinking in terms of objective"	22	38.6

3. Among all the things we have done so far which do you think is the most important? Why?

Categories	Examples	F	%
Defining the problem, thinking and writing	"it helps me to clarify the situation" "It forced me to think about my life"	13	30.2
Transforming the problem	"because the problem became something I can solve"	14	32.5
Functional analysis	"I can understand the causes and consequences of what happens" "Because I can identify the things that are not important" "Helps me simplify the situation"	10	23.3
Using the operational language	"because it helps me understand the behaviour of the people and also some things about me"	6	14.0

4. Have you happened to meet with difficulties recently? Could you describe the latest and tell us how you coped with it?

Categories	Examples	F	%
Difficulties with friends	"I tried to understand an event that happened to me thinking about when, where and with whom and what people said and did" "I discovered that what I thought was a problem with one of my friend is not a real problem"	22	48.8
Difficulties with family members/parents	"I tried to tell them using concrete verbs and specifying when I feel stressed" "I used it with my sister"	15	33.3
School achievement	"in order to foster my concentration I wrote some thoughts and I posted on my PC" "I have a problem with a subject and transformed this in an objective" "I began to think what I have to do"	18	40.0

Chosing =
finding the best option

1. Compare the options,
2. Evaluate these options
3. Identify the most advantageous.

Comparing the options is important becouse it helps you:
   - to examine them with attention
   - to do more reasoned choices
   - to chose the best option
   - to exercise your thinking ability

Samantha's utility table

jobs	aspects					Tot.
	Having a degree 5	Reading books and articles 2	Using the computer 1	Using maths abilities 4	Salary: 1500 € 3	
Expert in natural sciences	10 50	8 16	7 7	6 24	7 21	118
Physicist	10 50	9 18	8 8	9 36	6 18	130
Environmental expert	8 40	8 16	6 6	7 28	8 24	114
Mathematician	10 50	10 20	8 8	10 40	5 15	133
Biologist	10 50	6 12	6 6	6 24	7 21	113

Expected utility table

options	Advantages		Disadvantagies	
1. Drawing	I don't speak with others	+	I could think to my things	-
			I could miss the explanation	-
2 To take notes	I don't speak with others	+		
	I follow the explanation	+		
	I give a positive imagine of myself	+		
3 Try to follow the teacher	I don't speak with others	+	I could miss the explanation	-
	I give a positive imagine of myself	+		

Aggressive style

A person who:

- Says what he/she thinks improperly (offending or hurting others)

- Says what he/she wants improperly (regardless of others)

- Imposes his/her own objectives

- Only cares about him/herself

- Thinks that others are woth less than he/she is

- Thinks that his/her rights are more worth than those of others
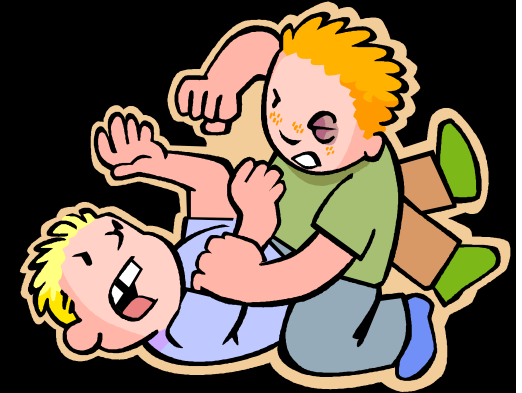
PARTICIPANTS

- The experimental group was made up of 3 boys and 40 girls ($Mage$ = 17.21; SD = .95) and the control group by 4 boys and 39 girls ($Mage$ = 16.88; SD = .71).

- An examination of group equivalences revealed the experimental group did not differ from the control group: PSI, $F(1, 85)$ = 2.858; p = .095, IASCF, $F(1,85)$ = .546; p = .462

Learning outcomes

	F	%
1st DU	43	100
2nd DU	43	100
3rd DU	41	95
4th DU	43	100
5th DU	43	100
6th DU	43	100
7th DU	41	95
8th DU	40	93
9th DU	43	100
10th DU	43	100

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