

Theory in Action: Live demonstration of Cognitive Information Processing (CIP) theory

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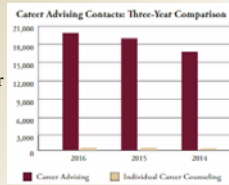
Today's Goals:

- Live demonstration of Cognitive Information Processing (CIP) theory
- Learn how to apply CIP theory with a variety of clients during a brief setting (15-20 minutes)
- Discuss CIP readiness model to identify clients who might need more individualized services
- Identify how to utilize and describe CIP theory with clients
- Present CIP research

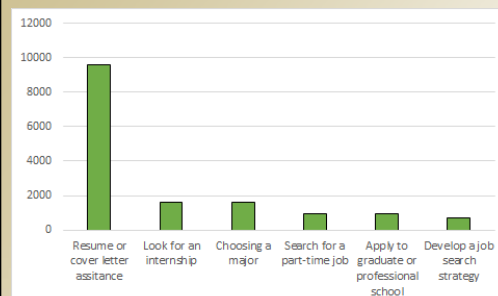


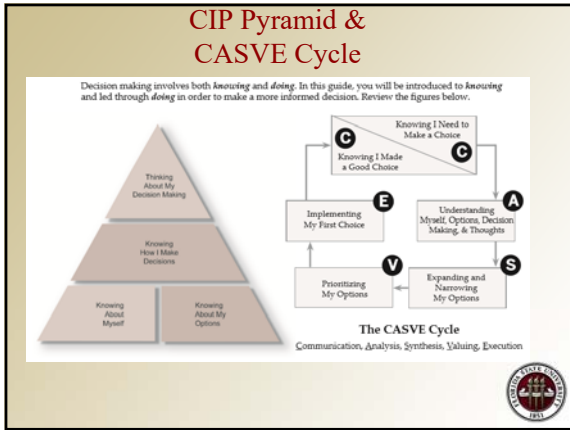
Why CIP theory?

- Easily translate a research based theory into practice which has been used at the Florida State University Career Center for the past 43 years
- CIP has been implemented at numerous other higher education career centers and school career guidance programs in the US and worldwide
- In 2017, the differentiated model allowed for 20,242 individuals to receive drop-in career services at our university career center



What brings you in today?





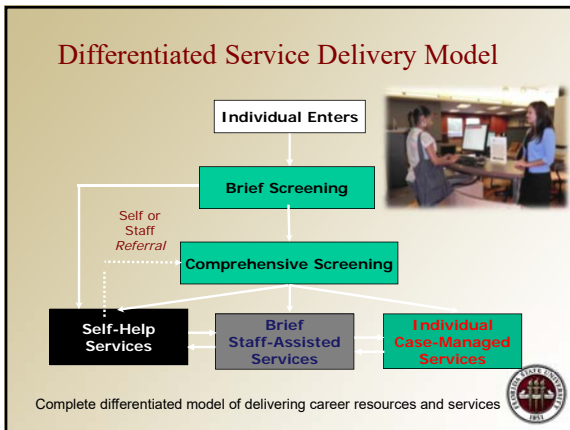
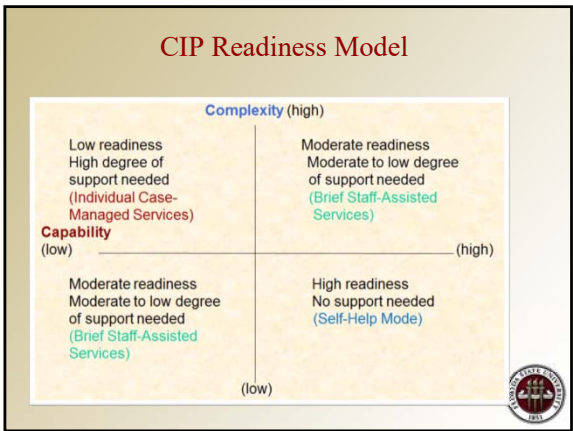
Readiness

The **capability** of an individual to make appropriate career choices taking into account the **complexity** of family, social, economic, and organizational factors that influence career development

Readiness also includes possessing adequate language skills and literacy skills for communication and learning

Source: Sampson, J. P., Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). *Career counseling and services: A cognitive information processing approach*. Pacific Grove, CA: Brooks/Cole.

- ### Accurate Assessment of Individual Needs
- **Capability** concerns internal factors that make it more, or less, difficult to decide about occupational, educational, training, or employment options
 - **Complexity** concerns external factors that make it more, or less, difficult to decide, such as the family, society, the economy, or organizations



Cognitive Information Processing (CIP) Live demonstrations

CIP in Practice - Roleplay

- Have your two diagrams in hand
- Our primary goal:
 - Identify the gap



Process the Roleplay

- What did you learn about the client?
 - What was the gap
 - Location on pyramid, CASVE, readiness
- Other thoughts/reactions?
- What might you do differently?
- Other interventions, theories



Structured Roleplay

- Shae
- Plan a brief-assisted as well as a referral to individual and show whichever one was not shown from the audience role play



Process Roleplay

- Leah
- Explain conceptualization in CIP terms
 - Gap, location on pyramid, CASVE, readiness
- Ask: What might you do differently?



Once we know the gap...

- We need to learn what's impacting the decision.
- We have a tool for that!



Decision Space Worksheet (DSW)



- Assessing personal and social context
- A measure of complexity



Available at:
<http://career.fsu.edu/tech-center/resources/service-delivery-handouts>

or <http://tinyurl.com/fsu-handouts>

Peterson, G. W., Leasure, K. K., Carr, D. J., & Lenz, J. G. (2010). The Decision Space Worksheet: An assessment of context in career decision making. *Career Planning and Adult Development Journal*, 25, 87-100.



Purpose of the Decision Space Worksheet (DSW)

- Cognitive mapping task
- Helps clients reveal thoughts, feelings, persons, circumstances associated with career decision
- Helps clients prioritize importance of contextual influences
- Can be used with middle school through college level students and adults



Let's Do It! (Partner Alert)

- Think of a decision related to your career.
- Write out all of the factors that are impacting this decision.
- Circle whether each is positive, negative, or neutral.
- On the backside, create a visual representation of each of these.



Partnering

- What was this experience like for you? Thoughts/feelings? May I ask you some questions about your responses?
- State the decision that your partner indicated.
 - Ask: “Would you like to add anything to this statement?”
- Look at the list of elements and valences.
 - Ask: “What is your impression of this list?”
 - “How does each item affect your career decision? Are some of the valences slightly stronger than others?”
- Look at diagram and note the top 3. Look for themes.
 - Are they all affective, or concern areas of interest, or suggest a negative self-concept, etc.?
- Summarize



Sample Summary

- “So, from this, you’ve shared that in figuring out your major, there are three main elements that are impacting your choice: cost/time required, unsure of what majors might interest you, and fear of making the wrong choice. On the plus side, your parents are very supportive, you’ve got a strong GPA, and have some time to figure this out. Would you agree with this? Would you add anything to what I just said?”



Group Debrief

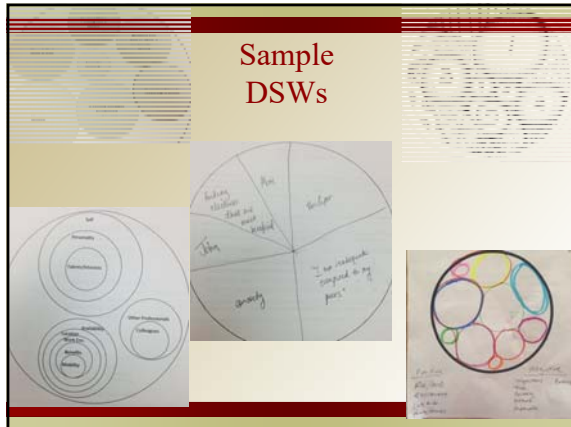
- What was the activity like?
- Which questions were most helpful?
- Where did you get stuck?
- What other questions would you add?
- What might you add?
- What issues can you see potentially emerging from this activity?



Types of Issues Revealed

- Cognitive distortion
- Disabling emotions
- Financial
- Family
- Education
- Interests
- Self doubt
- Employment
- Quality of life





Next Steps with the DSW

- Further readiness assessment?
- Develop the ILP
 - Readiness assessment
 - Career assessment
 - Options information
 - Referrals for mental health concerns

Research on CIP theory-based interventions

• “Probably the most widely studied career interventions....cognitive information processing theory...”

• “Studies in Iceland and Switzerland provide empirical support for the efficacy of CIP-based interventions.”

– Brown, S. (2015). Career intervention efficacy: Making a difference in people's lives. APA Handbook of Career Interventions, Vol. 1.

	1970-1999	2000-2009	2010-2016	TOTAL
1) Articles	24	34	34	138
2) Books, Handbooks, and Manuals	6	20	10	36
3) Book Chapters	3	14	9	28
4) Dissertations and Theses	10	30	18	56
5) Technical Reports	7	7	5	19
TOTAL WORKS	62	120	96	277

	1970-1999	2000-2009	2010-2016	TOTAL
1) Outcome, Pre-Post	2	14	9	25
2) Process/Application	3	14	15	32
3) Validity of Measures	11	51	39	101
TOTAL WORKS	16	79	63	158

ANOVA Pre/Post Test Results

Comparisons between Pre-intervention and Post-intervention Scores on Brief Staff-Assisted Outcomes (n = 138)

Dimension	Pre-intervention		Post-intervention		F	d	Percent of Change Scores ^a		
	M	SD	M	SD			Positive	Neutral	Negative
1. Knowledge of next steps	3.40 ^b	1.04	3.90	.81	36.22**	.51	38.4	55.8	5.8
2. Confidence in next steps	3.77 ^a	.89	4.01	.71	13.29**	.31	26.5	64.0	9.6
3. Anxiety about concern	3.46 ^b	1.10	3.20	1.03	9.20*	-.26	10.8	57.2	31.9

^ap < .01
^bp < .001

a. 5-point scale, 5 = Strongly agree, 1 = Strongly disagree
b. 4-point scale, 1 = not at all anxious, 2 = A little anxious, 3 = Moderately anxious, 4 = Very anxious
c. Change score = (post-intervention minus pre-intervention)

Significant changes on each variable
Medium ES for knowledge & confidence
Small ES for anxiety

Process Indicators

Process Indicators for Brief Staff-Assisted Interventions

Variable	M	SD	Range	Notes
1. Session Rating Scale Total ^a	37.74	5.10	40 - 6	84.8% 36 or above
2. Made progress on career concern ^b	4.12	.777	5 - 1	84.0% agree or strongly agree
3. Felt positive about accomplishment ^b	4.39	.69	5 - 2	92.8% agree or strongly agree
4. Career advisor assisted me with strategies ^b	4.42	.64	5 - 2	93.4% agree or strongly agree
5. Need for additional service ^c	1.80	.54	1 - 3	26.3% none 67.2% brief walk-in 6.6% individual counseling

a. 4 items, 10-point scale, 10 = high, 1 = low
b. 5-point scale, 5 = strongly agree, 1 = strongly disagree
c. 3-point scale, 1 = none, 2 = brief walk-in, 3 = individual counseling

Dysfunctional career thoughts directly correlated with mental health constructs

<input checked="" type="checkbox"/> indecision	<input checked="" type="checkbox"/> depression
<input checked="" type="checkbox"/> neuroticism	<input checked="" type="checkbox"/> hopelessness
<input checked="" type="checkbox"/> anxiety	<input checked="" type="checkbox"/> impulsivity
<input checked="" type="checkbox"/> angry hostility	<input checked="" type="checkbox"/> vulnerability

More recently, somatic concerns, obsessive-compulsive symptoms, and personality disorders (qualitative study - Finklea, 2016)

Use and Impact of the CIP Approach

In terms of impact, the CIP differentiated service delivery approach has been shown to **improve**

- career decidedness
- vocational identity
- choice satisfaction
- self-knowledge
- career option knowledge

and to **decrease**

- negative career thinking
- anxiety
- goal instability



Summary

- CIP offers simple structures to the sometimes chaotic and complex nature of career decision making.
- CIP provides a guide for understanding clients' gaps and for pinpointing relevant interventions.
- CIP offers tools to aid career practitioners in their work.
- CIP differentiated model is efficient and effective.
- CIP continues to generate research and has an ongoing bibliography.

BIBLIOGRAPHY: A COGNITIVE INFORMATION PROCESSING (CIP) THEORY-BASED APPROACH TO CAREER DEVELOPMENT AND SERVICES
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www.career.fsu.edu/techcenter

Slides will be available at
<http://www.career.fsu.edu/tech-center/resources/presentations/ncda-presentations>

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