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# **A View from the Editor's Desk: Ensuring Quality in Theory, Research, and Practice**

**A Viewpoint of an Editorial Board member  
of the *Journal of Career Assessment***

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# From the Homepage of the Journal of Career Assessment



*Journal of Career Assessment (JCA)* provides methodologically sound, **empirically based studies** focusing on the process and techniques by which counselors gain understanding of the individual faced with making informed career decisions.

The journal covers the various techniques, tests, inventories, rating scales, interview schedules, surveys, and direct observational methods used in **scientifically based practice** to provide an improved understanding of career decision-making.

# Introductory Comments



To be sure, my views do not represent those of Prof. Bruce W. Walsh (the editor of *JCA*) or other editorial board members

I am relying on my experience (as an author of 68 papers in . . . ) and as the Editorial Board member of the:

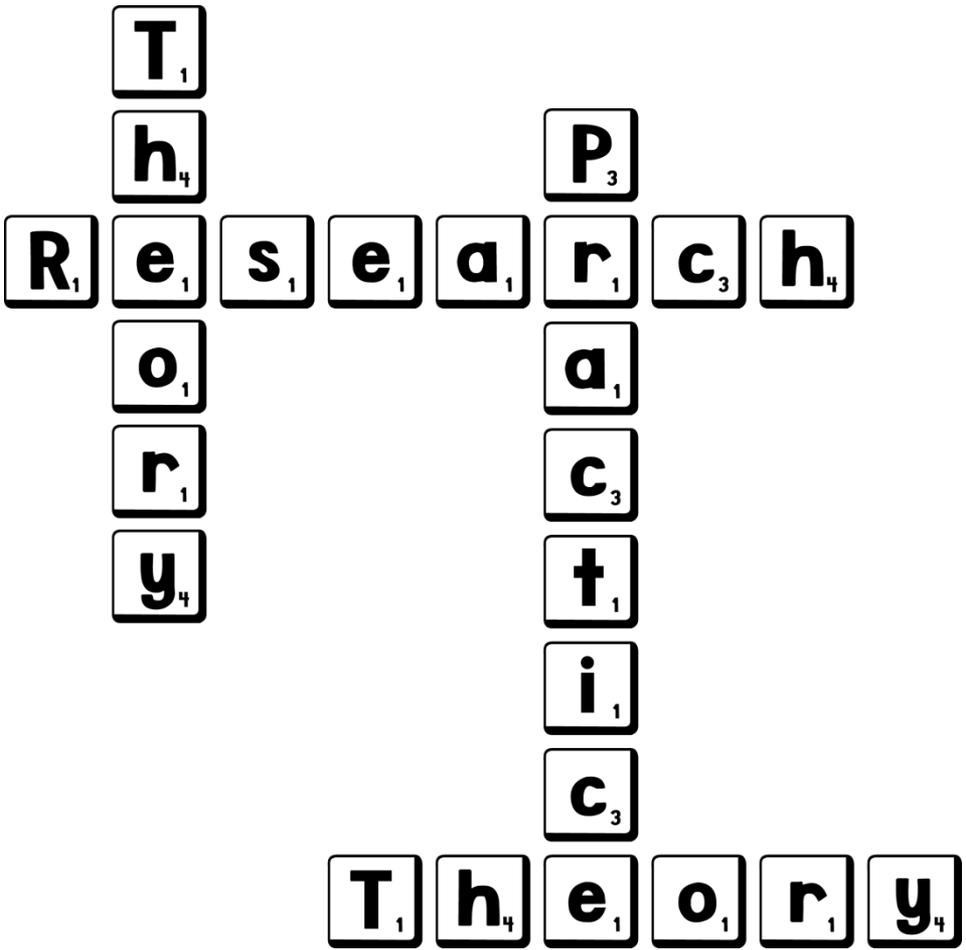
- *Journal of Career Assessment*
- *Journal of Counseling Psychology*
- *The Counseling Psychologist*
- *The Journal of Vocational Behavior*
- *Career Development Quarterly*

And on my experience as an author and Ad-hoc reviewer for:

- *The British Journal of Guidance and Counselling*
- *Journal of Career Development*
- *The International Journal of Educational and Vocational Guidance*

Finally, I will focus on issues involving *career assessment*.

# So, let us focus on the interplay among...



# Using *ICT* can Facilitate Integrating Theory, Research, and Practice



## In my afternoon presentation (1pm) I will:

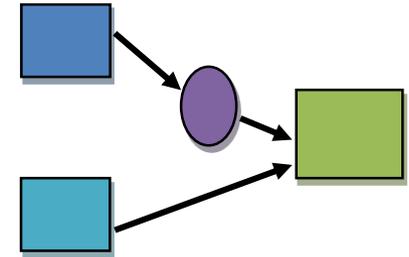
- Explore the role of *ICT* in improving the quality of **career assessments**
- Describe the role of *ICT* in designing evidence-based **career interventions**
- Demonstrate the contribution of *ICT* to the integration of **theory, research, and practice**
- Discuss the unique and critical role of *ICT* in facilitating the integration of **theory, research, and practice**

# Ensuring Quality in Theory, Research, and Practice



## Criteria for the quality of *Theories*

- Lead to testable (and refutable) predictions
- Stimulate research
- Have practical implications



# Ensuring Quality in Theory, Research, and Practice



## Criteria for the quality of *Research*



- Internal and external validity
- Appropriate participants
- Informative conclusions (with implications for theory and practice)

# Ensuring Quality in Theory, Research, and Practice



## Criteria for the quality of *Practice*

- Theory-based
- Client satisfaction
- Evidence-based (i.e., supported by research)
- Transferable interventions



# Ensuring Quality in Theory, Research, and Practice



## Types of papers in the *JCA*:

### “Pure”

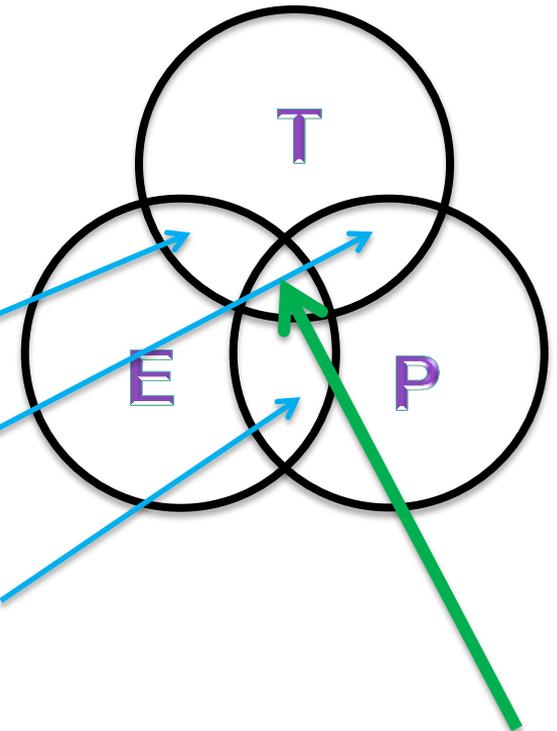
- **Theoretical** – relatively few (special issues)
- **Empirical** – most of the papers
- **Practice-oriented** – evaluation of interventions

### “Combined”

- **Theoretical and empirical** – frequent
- **Theoretical and practice-oriented** – rare
- **Empirical and practice-oriented** – quite frequent

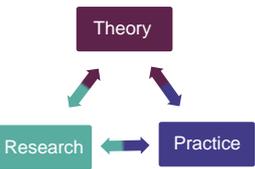
### “Comprehensive”

- **Theoretical, empirical, and practice-oriented** – **desirable but challenging**

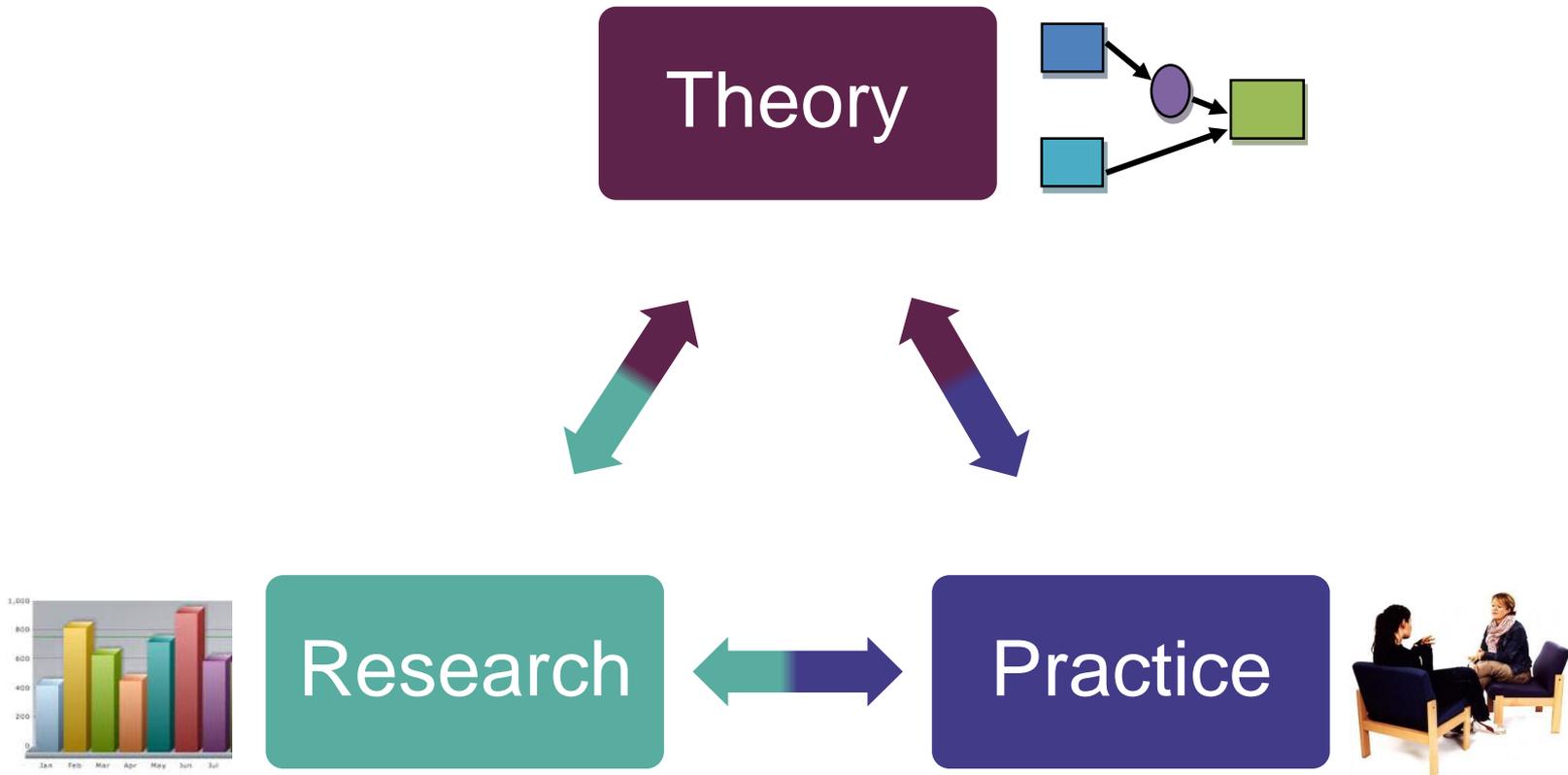




# The Relevance of Integrating Theory, Research, and Practice

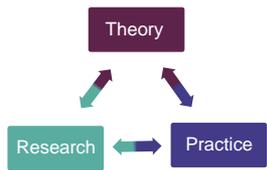


Integration has bi-directional implications:





# Ensuring Quality in Theory, Research, and Practice



## *Types of career-related assessments:*

- **Unidimensional** (e.g., *Occupational Self-Efficacy*, short form);  
*Job satisfaction*)
- **Multidimensional**
  - without a total score (e.g., the *SDS* or the *NEO-PI /Big Five Inventory*)
  - with an informative total score (e.g., the *Career Thoughts Inventory*, the *Career Decision-making Self Efficacy scale*, the *Career Decision-making Difficulties Questionnaire*)
  - with an informative *partial* score (e.g., the *CDMP* – the *Career Decision Adaptability score*)

# An Example of the Integration of Theory, Research, and Practice:



## *Dysfunctional Beliefs about Career decision-making*

(Hechtlinger, Levin, & Gati, 2016)

### Starting points:

**Practice** (Nevo, 1987): discussed 10 irrational expectations (we prefer to call them *dysfunctional beliefs*)

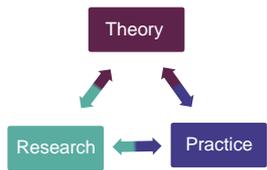
**Theory:** The cognitive therapy approach (Beck, 1976), which claims that dysfunctional thoughts have a crucial effect on behavior and feelings

and

**Previous research . . .**

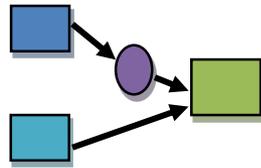


# Ensuring Quality in Theory, Research, and Practice

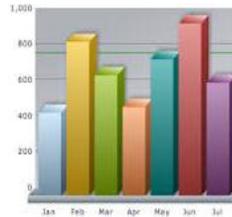


And the three optional starting points for integration:

- Theory



- Research



- Practice



# An Example of the Integration of Practice, Theory, and Research

## *Dysfunctional Beliefs about Career decision-making*



**Starting point 1: Practice** - Nevo's (1987) 10 irrational expectations:

1. **There is only one vocation in the world that is right for me**
2. **I cannot be happy if I don't find my perfect vocation**
3. **Someone else can discover the best vocation for me**
4. **Intelligence tests will tell me how much I am worth**
5. **I must be an expert or very successful in the field of my work**
6. **I can do anything if I try hard, or I can't do anything that doesn't suit my talents**
7. **My vocation has to satisfy the important people in my life**
8. **Entering a vocation will solve all my problems**
9. **I must sense intuitively that this vocation is right for me**
10. **Choosing a vocation is a one-time act**

These 10 items can be categorized into 4 groups:

Concerning vocations (1-2)

Concerning career counselors and tests (3-4)

Concerning the self (5-8)

Concerning the decision-making process (9-10)

# An Example of the Integration of Theory, Research, and Practice



## Starting point 2: Previous research using the *Career Decision-making Difficulties Questionnaire (CDDQ)*

- Low internal consistency reliability of the **dysfunctional beliefs (DB) scale** of the *CDDQ* – low intercorrelations among the 4 items (e.g., Gati, Osipow, & Krausz, 1996 ; Xu & Tracey, 2015)
- The *DB* scale score is among the **highest scale scores** in the *CDDQ* (e.g., Mau, 2001; Gati, Ryzhik, & Vertsberger, 2013)
- Individuals have significantly **less awareness** of their difficulties in this category (in comparison to other difficulties involved in career decision-making; Amir & Gati, 2006; Kleiman & Gati 2004; Kleiman, Gati, Peterson, Sampson, Reardon, & Lenz, 2004)

# The Integration of Theory, Research, and Practice: Dysfunctional Career Beliefs



## Starting point 3 – Previous Measures involving Dysfunctional Career Beliefs

- **Career Thoughts Inventory (CTI)** – (48 items); 8 dimensions were derived from the *Cognitive Information Processing* approach, **3 scales emerged empirically** with 14, 10, 5 items per scale (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996, 1998)
  - **Career Beliefs Inventory (CBI)** – (96 items) **25 scales**, with 8 to 2 items per scale (Krumboltz, 1994)
  - **Career Myths Scale (CMS)** – (27 items) **4 factors** emerged empirically with 7, 7, 2, 2 items per factor (Stead & Watson, 1991, 1993)
- ➔ These studies highlight the need for a theoretically based and empirically supported multidimensional measure, focusing not on beliefs about careers in general, but on **Dysfunctional Beliefs about Career decision-making**

# The Proposed Categories of *Dysfunctional Beliefs about Career decision-making (DBC)*



Next – Theoretically derived six categories of *dysfunctional beliefs* about career decision making:

- The role of *Chance or Fate* . . . . .



- The *Criticality* of the decision . .



- The aspiration for *Choice Perfection* . . . . .



- The role of *Significant Others* . .

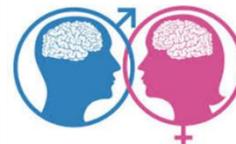


- The role of *Professional Help* . . . . .

Career Counseling



- The impact of *Gender* . . .



# Results

(Hechtlinger, Levin, & Gati, 2016)



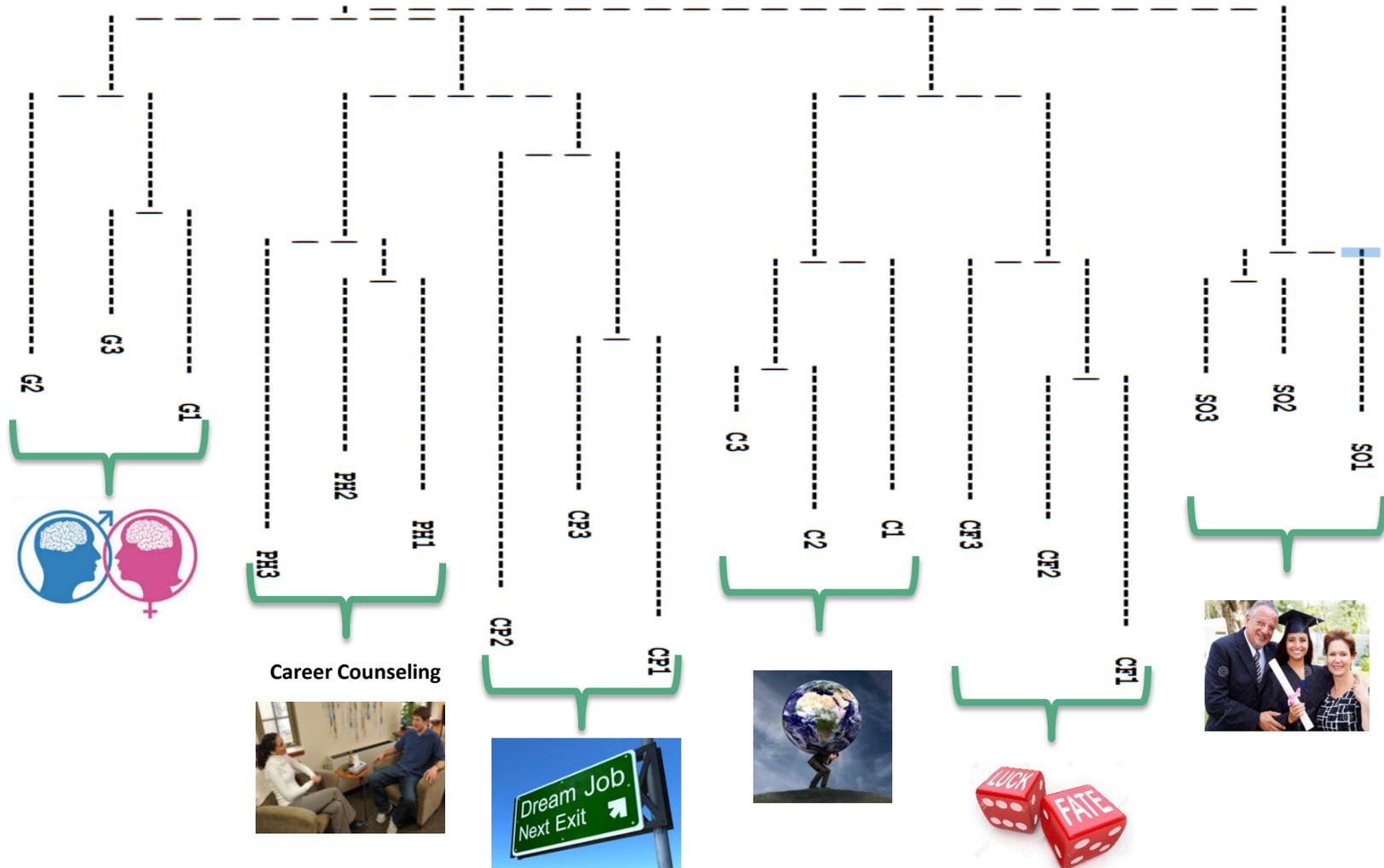
**Study 1** – Results of EFA based on 937 young adults deliberating about their future career supported the six factors

Scale	$C_{\alpha}$	% of Variance accounted for
<i>Significant Others</i>	.83	11
<i>Chance or Fate</i>	.75	10
<i>Choice Perfectionism</i>	.72	9
<i>Gender</i>	.84	11
<i>Professional Help</i>	.82	11
<i>Criticality</i>	.72	9

# Results (Hechtlinger, Levin, & Gati, 2016)



**Study 2a (N=617) Cluster analysis** also supported the theoretical model



# The Total *DBC* Score is NOT Informative



**Study 2b.** Fit indices for **confirmatory factor analysis** of the *Dysfunctional Beliefs about Career decision-making* questionnaire ( $N=634$ )

Model	$\chi^2$	df	$\chi^2/df$	CFI	RMSEA	SRMR	
18-6-1	340.26	129	2.64	.94	.052	.045-.058	.06
18-6	300.89	120	2.51	.95	.049	.043-.056	.05
18-1	1674.76	135	12.41	.53	.136	.130-.142	.11

CFI = comparative fit index

RMSEA = root-mean-square error of approximation

SRMR = standardized root-mean residual

# Results – The Informativeness of the Total *DBC* Score



**Study 2a+Study 2b.** Concurrent validity test also showed that the **total score** is not informative in predicting individuals' **career decision-making status** ( $N=1251$ )

	Undecided (n=587)	Partially decided (n=520)	Decided (n=130)	F (2,1234)	$\eta^2$
Total score	4.25 (1.14)	4.24 (1.08)	4.17 (1.11)	0.30	.00

**.00  $\leq \eta^2$  for scales  $\leq .08$**

# Implications for Practice



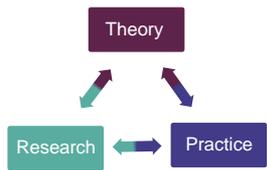
The **DBC** *questionnaire* is:

- (1) theoretically based
- (2) an empirically supported measure of individuals' dysfunctional beliefs about career decision making
- (3) has a reasonable number of scales (6 in the **DBC**)

Enables tailoring the intervention to the client's specific dysfunctional beliefs about career decision making



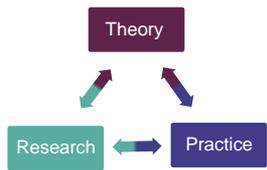
# The Challenges in Integrating Theory, Research, and Practice



- Explicating the theoretical rationale of assessments
- Promoting multidimensional assessments
- Testing the rationale and informativeness of the total score
- Using multiple approaches to assess the quality of measures
- Be meticulous about translated or adapted assessments
- Effectively incorporating multidimensional assessments into career counseling practice



# The Opportunities for Integrating Theory, Research, and Practice



Using **ICT** can facilitate the integration of **theory**, **research**, and **practice** by increasing access to appropriate groups (i.e., students deliberating about their major, seniors looking for a job, adults considering a career change).

- Experts' knowledge can be translated into structured interventions (e.g., recommendations about how to deal with specific career decision-making difficulties).
- The effectiveness of these structured (and computerized) interventions can be measured (e.g., which types of difficulties can be reduced by what interventions to which individuals).
- The conclusions can be used to upgrade interventions and refine the theory.



# Finally - RECOMMENDATIONS for JOURNAL EDITORIAL POLICY



## Theories:

- Encourage **refuting** theories, not only confirming them
- Encourage **comparing** theories (e.g., the **CIP** and the **PIC**) in terms of their common and distinctive features

## Research:

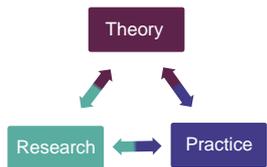
- Encourage **multidimensional** assessments
- Encourage **innovative** designs
- Encourage **using appropriate** groups of participants
- Encourage **multiple** studies

## Practice:

- Encourage testing the **incremental** value of interventions and measures
- Encourage **pinpointing the specific components** of interventions that make a difference

## General:

- Encourage dialogues (discussions / comments / reactions / rejoinders)



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