Career counselling tips

Training Modules: Pedagogy And Psychology For Career Counseling

Training of the future career guides including antifragility, mindset building, ikigai, career counseling tips and pedagogical approaches to career guidance.

Part 4

Introduction

Our world is a **VUCA world** which is marked by Volatility, Uncertainty, Complexity and Ambiguity. It represents a challenging environment for decision-making and planning. Such an environment requires adaptability, resilience and strategic agility to thrive in a context of rapid change and unpredictable circumstances.

Traditional career methods lack effectiveness due to their rigid structures and inability to adapt to the rapid pace of change. **Constructivist methodologies** are crucial as they emphasize individualized learning, continuous adaptation, and self-directed exploration.

In career guidance, building a strong **working alliance** is crucial as it encompasses mutual trust, agreement on goals and collaboration on task to achieve positive outcomes.

In an environment as dynamic and changing as that of VUCA world, constructivism enables personalized career guidance, recognizing the unique skills and aspirations of each individual.

The strong alliance between counselor and client ensures a collaborative approach, vital for navigating uncertainties and embracing diverse perspectives in effective career planning. **Together, constructivist methodologies and a strong working alliance empower individuals to proactively shape their careers amidst volatility and uncertainty.**

In this training section, you will also learn how you can use artificial intelligence in career guidance.

Competence Goals

1. No success in guidance process without being aware that strong **Working Alliance is necessary.**

1. Using constructivist approaches / methods:
   - Exploring life and working expériences for self-construction with the "Talents and Transitions Patchworks" method.

1. Being aware of new approaches, **taking account AI** in everyday life in career counseling. Learning how you can use artificial intelligence in career

Duration and Contact Hours

1 ECT = 27 hours

Three half-day meetings á 4 hours and independent work 10 hours.
Peer exercises 5 hours.
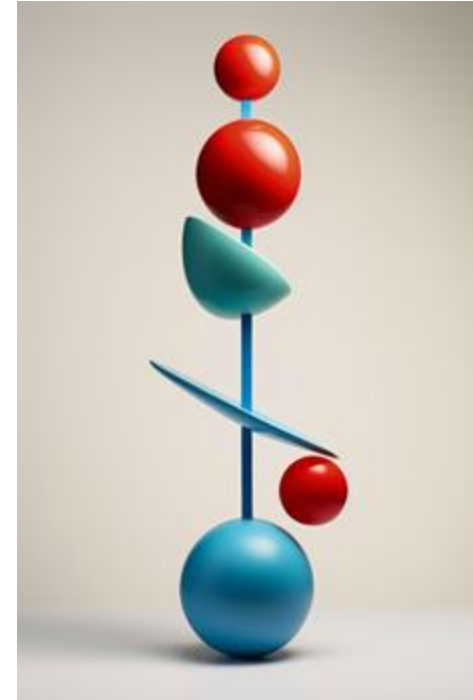
Content framework

1. Discover and improve working alliance

2. Exploring life and working expériences for self-construction from a constructivist point of view

3. Rethinking career counseling - taking account AI in everyday life in career counseling

Source: https://www.freepik.com/ Retrieved 20.2.2024

1.Discover and improve working alliance

Working alliance

The working alliance in career counseling is a collaborative partnership between counselor and client, fostering trust and alignment to explore career goals, leverage strengths, and develop strategies for professional growth.

A strong working alliance is essential for effective counseling and positive client outcomes.

Source: https://www.freepik.com/ Retrieved 20.2.2024

Working alliance

&

Career guidance

Working alliance ? What is it ?

The concept of the working alliance

was originally proposed by psychotherapy researchers
Edward Bordin and **Lester Luborsky**.

Edward Bordin introduced the concept in 1979.
Bordin's work focused on the therapeutic relationship
and its impact on treatment outcomes.

The concept of the working alliance has since been widely adopted and applied in various therapeutic approaches and settings.

"The working alliance is a collaboration for change (…)"

Edward S. Bordin

A Working Alliance Based Model of Supervision

Edward S. Bordin. 1913-1992

Bordin, E. (1979). The generalizability of the psychoanalytic
concept of the working alliance.
Psychotherapy: Theory, Research, and Practice, 16,
252–260

Working alliance

Collaboration between practitioner and client,
in which **both parties strive to work together**

and achieve positive change for the

client.

It requires ongoing effort, attention and a collaborative mindset.

3 aspects

The bonds between the partners necessary to sustain the process.

The mutual agreements and understandings regarding **the goals** sought in the change process

The tasks of each of the partners

Which requires

Trust and mutual respect

Shared understanding

Personal commitment (Counselor / Client)

According to Bordin:

- The alliance is applicable to all   therapies.
- Different therapies would naturally   emphasize different aspects of the   alliance.
- **The strength of the alliance is not   something static, but would   fluctuate over the course of   therapy,**
- Attending to stresses on the   alliance would offer rich   opportunities for therapeutic   progress and client growth.

The working alliance is a robust predictor of client satisfaction

In 2007, Swiss researchers (Massoudi et al.) demonstrated that **a combination of cognitive and relational parameters** contributed to predicting more than 50% of client satisfaction with guidance support.

- **Cognitive elements**

  Help the client to acquire necessary knowledge about his individual characteristics and his environment

- **Relational elements**

  Form of the intervention involving the working alliance

Parameters relating to the success of a support process according to a study by Hubble, Duncan and Miller (1999)
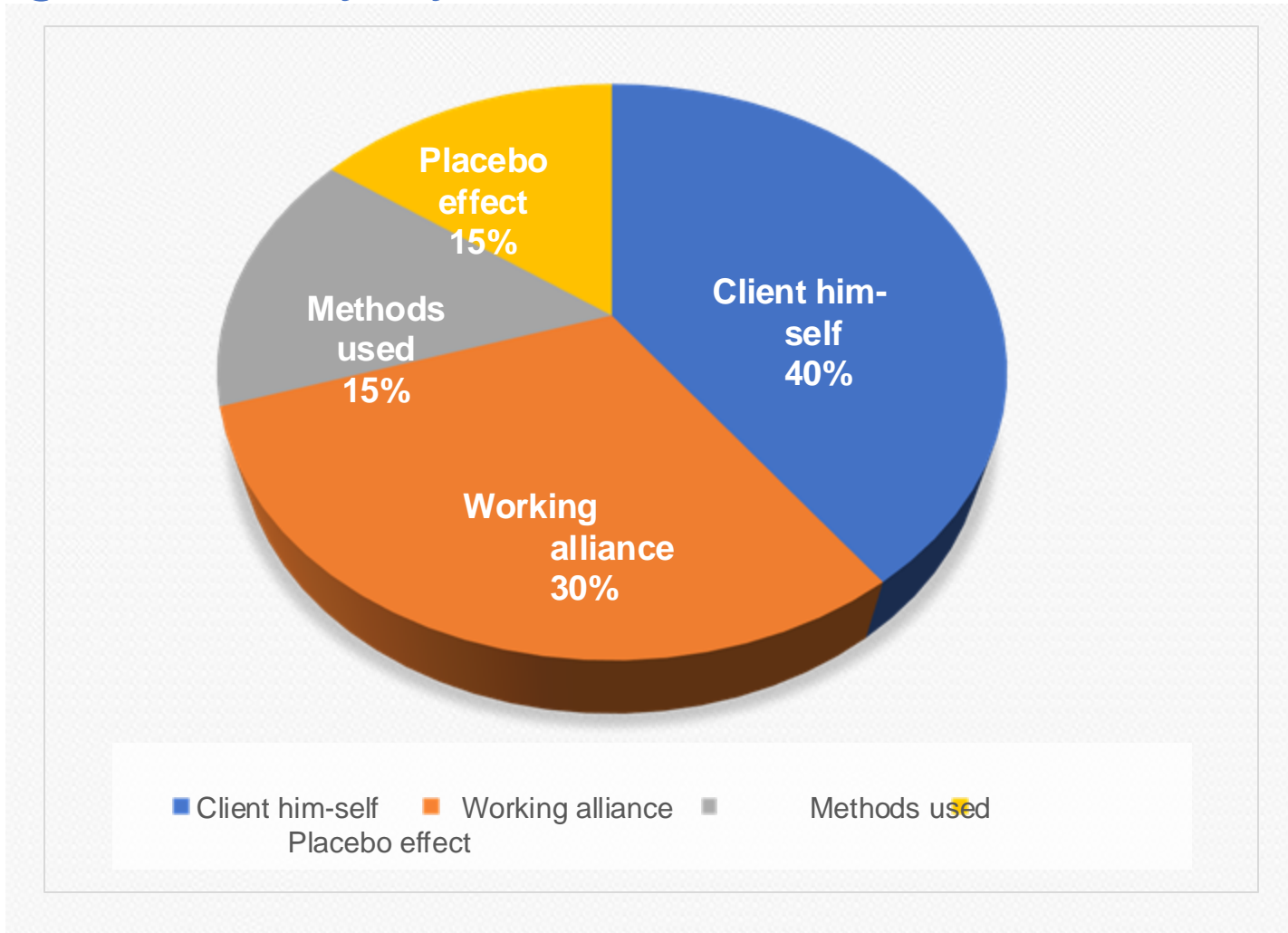
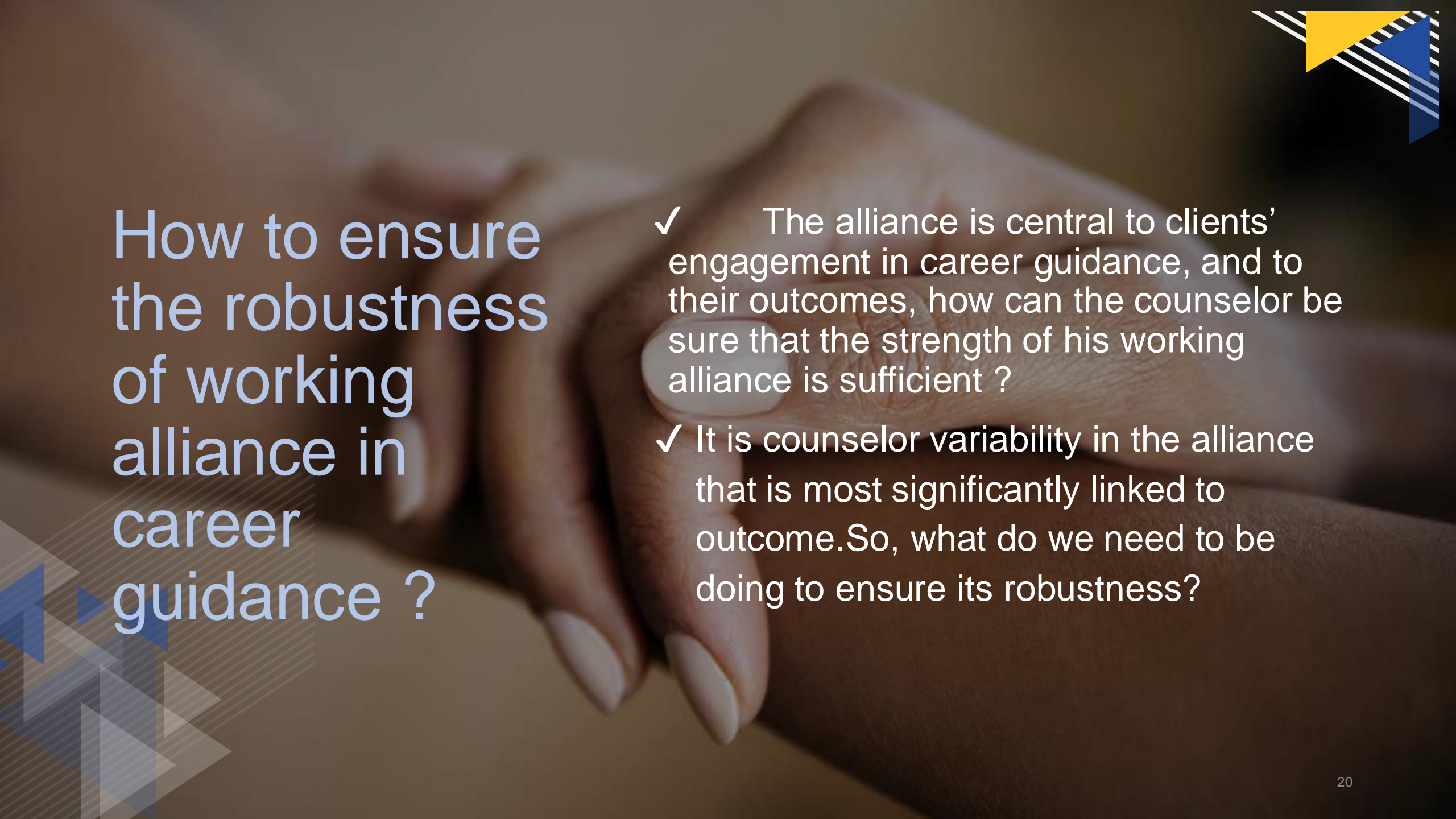Four important parameters contribute to the success of a support process:

✓ The client himself or herself: …. %
✓ The working alliance: …. %
✓ The methods used: …. %
✓ The placebo effect: …. %

Parameters relating to the success of a support process according to a study by Hubble, Duncan and Miller (1999)

Pie chart:
- Client him-self 40%
- Working alliance 30%
- Methods used 15%
- Placebo effect 15%

Legend: Client him-self · Working alliance · Methods used · Placebo effect

How to ensure the robustness of working alliance in career guidance ?

✓   The alliance is central to clients' engagement in career guidance, and to their outcomes, how can the counselor be sure that the strength of his working alliance is sufficient ?

✓ It is counselor variability in the alliance that is most significantly linked to outcome.So, what do we need to be doing to ensure its robustness?

How to ensure the robustness of working alliance in career guidance ?

- **Establish a strong foundation:** Lay the groundwork for a solid working alliance from the beginning.
- Emphasize the importance of collaboration, trust, and open communication. Create a safe and non-judgmental space where the client feels comfortable sharing their career concerns, aspirations, and challenges.

- **Active listening and empathy:** Practice active listening and demonstrate empathy towards the client's career-related experiences. Show genuine interest in their perspectives, validate their emotions, and seek to understand their unique needs and values. This fosters a sense of being heard and understood, strengthening the alliance.

- **Individualized approach:** Tailor the career guidance process to the client's individual needs and preferences. Recognize that each client is unique, and their career path should reflect their personal goals, values, and strengths. Involve the client in decision-making and respect their autonomy and agency in shaping their career direction.

- **Goal alignment and clarity:** Collaboratively set clear and meaningful career goals with the client. Ensure that the goals align with the client's aspirations and are specific, measurable, achievable, relevant, and time-bound (SMART). Regularly revisit and update these goals based on the client's progress and evolving needs.

- **Regular feedback and check-ins:** Actively seek feedback from the client about their experience of the working alliance and the career guidance process. Regularly check in to assess their satisfaction, concerns, and any areas that may need improvement. Use this feedback as an opportunity to address any issues and make necessary adjustments to enhance the working alliance.

- **Transparent communication:** Maintain open and transparent communication with the client throughout the career guidance process. Clearly communicate the counselor's role, expectations, and limitations. Ensure that the client understands the purpose and process of career guidance, including the potential challenges and steps involved.

- **Skill development and empowerment:** Help the client develop essential career-related skills and empower them to take ownership of their career development. Provide resources, tools, and guidance to enhance their job search skills, networking abilities, resume writing, and interview preparation. Encourage self-reflection and self-directed learning to build their confidence and competence.

- **Address ruptures and conflicts promptly:** Acknowledge and address any ruptures or conflicts in the working alliance as they arise. Promptly communicate with the client to understand their concerns, perspectives, and any challenges they may be experiencing. Engage in open dialogue, validate their feelings, and work collaboratively to resolve any issues that may impact the alliance.

By implementing these strategies, career counselors can foster a robust working alliance in career guidance, promoting collaboration, trust, and effective support for the client's career development journey.

The evaluation of the working alliance shouldbe an ongoing process throughout counseling.

<u>Regularly assessing the alliance</u> allows for early identification of any issues or ruptures that may need attention and facilitates adjustments to improve the therapeutic relationship if necessary.

- **Self-report measures** can be used to assess the client's perception of the working alliance. They include items that capture the client's feelings of trust, collaboration, and the quality of the therapeutic relationship. Examples of widely used self-report measures include the **Working Alliance Inventory (WAI)** and the Helping Alliance Questionnaire (HAQ).

- **Therapist ratings** can assess factors such as their own perceived rapport with the client, the level of collaboration, and their own sense of the therapeutic relationship's quality. This can be done through reflective practice, supervision, or consultation with other professionals.

- **Observational assessment:** An external observer, such as a supervisor or a trained researcher, can observe therapy sessions and assess the working alliance based on their observations. They can look for indicators of a positive alliance, such as mutual respect, empathy, and effective communication. This method requires the observer to have a good understanding of the working alliance framework and therapeutic dynamics.

- **Client feedback:** Regularly seeking feedback directly from the client is an important way to evaluate the working alliance. This can be done through verbal communication, written feedback forms, or feedback surveys. The client's input provides valuable insights into their experience of the therapeutic relationship, their level of satisfaction, and areas that may need improvement.

- **Goal achievement:** The extent to which the client is making progress toward their therapy goals can also be an indirect measure of the working alliance. If the client is achieving their desired outcomes and experiencing positive changes, it can indicate a strong and effective working alliance.

**Thank you
for
your attention**

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Task 1

How do you manage with your clients at this moment regarding the working alliance?

What are, according to you the crucial factors, that you need to focus in counseling situations?

Make note/checklist for you .

Discussion between participants:

How do you manage working alliance in your daily life situations?

How do you usually evaluate the quality of working alliance?

Task 2

Over the years, various researches has been carried out on the question of the impact of the working alliance on the results obtained in the context of professional development support.

Researchers have designed specific questionnaires to help counsellors to evaluate the working alliance. Test a simplified version of these questionnaires. Would it be useful for you and your client?

Source: https://www.freepik.com/ Retrieved 20.2.2024

A quick exercise to evaluate the working alliance quality can involve using a Likert scale or a simple rating system.
Evaluation Statements:

Client Ratings:	1. Strongly disagree	2	3	5	5. Strongly agree
"I feel comfortable discussing my career concerns with the counselor."					
"I believe the counselor understands my unique skills and aspirations."					
"I trust the counselor's guidance in my career exploration."					
"I feel encouraged to actively participate in shaping my career path."					

Ask your client to rate each statement based on their experience during the counselling session.
Discussion:
After your client has provided ratings, discuss their responses together.
Encourage open communication about any areas of strength or areas that may need improvement in the working alliance.
Action Planning:
Collaboratively identify strategies to exchange the working alliance, if needed.
Discuss any adjustments in counseling approaches or communication styles that could better align with the client's needs.

This exercise not only provides a quick assessment but also opens up a dialogue between the counselor and the client, reinforcing the collaborative nature of the working alliance. It allows for real-time feedback and adjustments to ensure a positive and effective counseling relationship.

Innovative European Career Guidance

2. Constructivist approaches

Constructivist approaches

The constructivist approach is probably the most appropriate way to deal with the VUCA world.

Constructivist approaches in career guidance involve empowering clients to **construct their own career narratives, identities, and goals through reflective exploration and active engagement**.
Practitioners facilitate a collaborative process, where clients explore their unique experiences, values, and aspirations to make informed career decisions aligned with their evolving selves.
These approaches emphasize self-awareness, autonomy, and meaning-making in the career development journey.

Study Case: One Constructivist Method used in career guidance

**When life-span and life-space
are really taken into account
in career guidance process.**
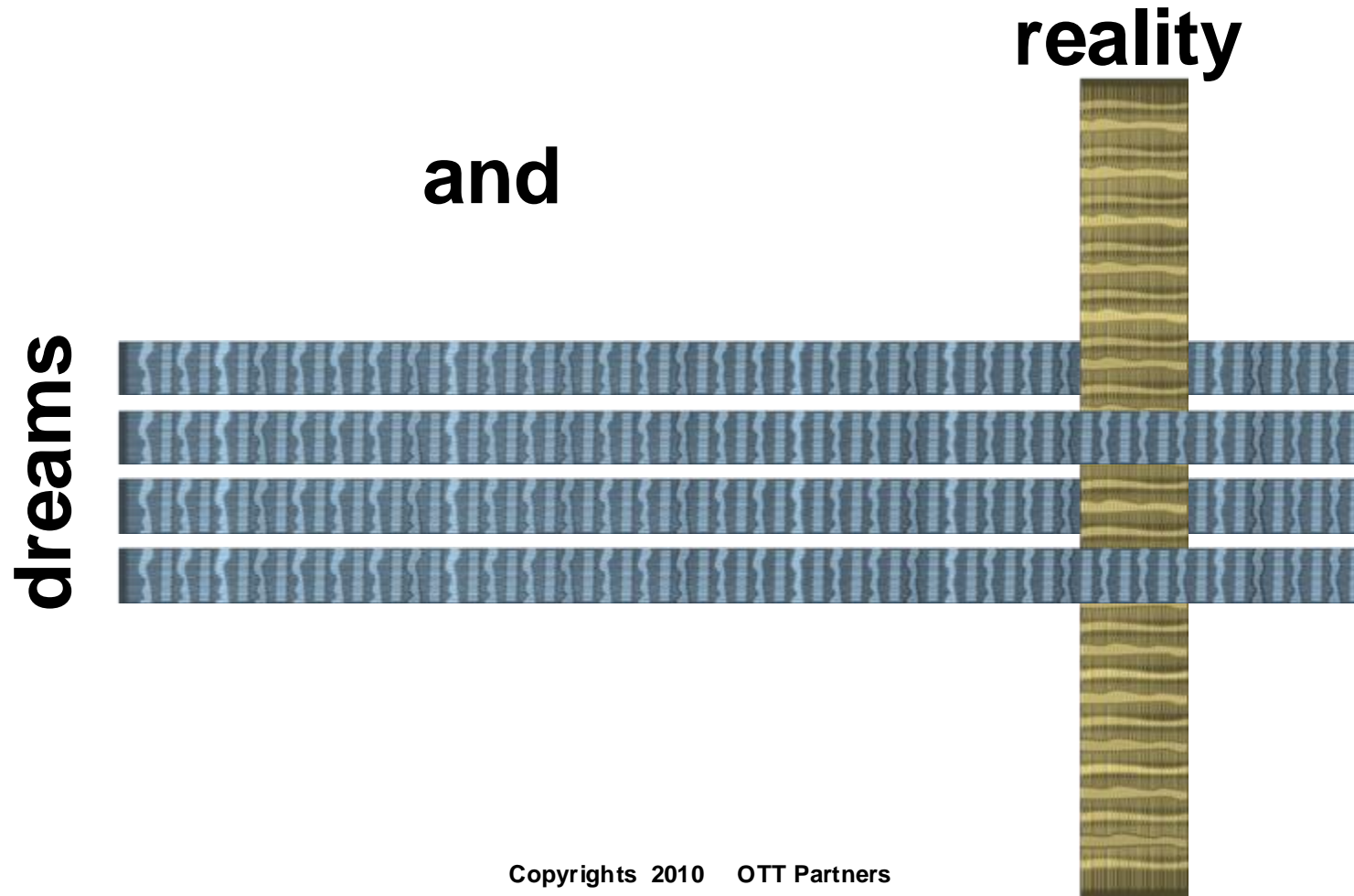
**Let us quilt
Talents & transitions**

Who said ?

« We are such stuff
as dreams
are made of … »

William Shakespeare

Like stuff, career success is the perfect match between :

reality

and

dreams

Is there any link
with
career guidance ?

**Let us have a look to
John's career situation …**

Let us give John the opportunity to tell his story

Act I.
The told story :

John is thinking about moving to a new job …

- He is 32 years old

- He got married last year

- He presently works as a warehouseman.

- Last month he got a degree as professional buyer

- He has several hobbies : reading and collecting books, computer programming and gardening.

What is John's first idea about his next job ?

◉ As he just got a new degree as a **professional buyer**, he his thinking about applying for this position within the company where he actually works.

Logical !

but …

What about life-space and life-span ?

- A career is defined as the combination and sequence of roles played by a person (**life-space**) during the course of a lifetime (**life-span**).

- Roles include those of child, pupil or student, leisurite, citizen, worker, spouse, homemaker, parent, and pensioner, positions with associated expectations that are occupied at some time by most people.

D. Super

Patchwork: a story in…
the History.
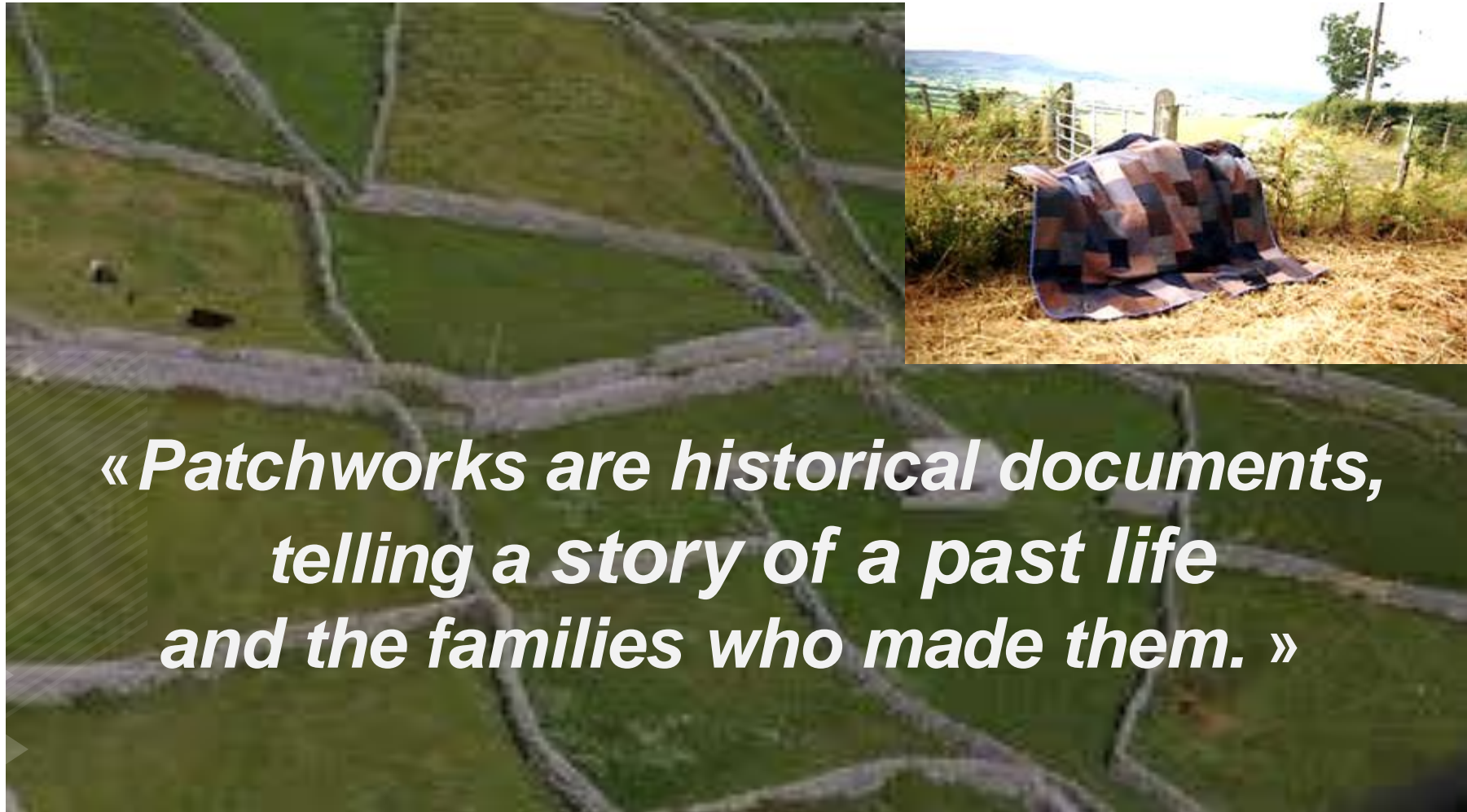
« Patchworks are historical documents,
telling a story of a past life
and the families who made them. »

So, let's ask John **to quilt** his previous experiences

- John, could you make a kind of patchwork with the different activities you had in your previous jobs and in your spare time ?
- Use four colours (**blue green red** and **yellow** to illustrate these activities depending if you liked them or no.
- Use a specific depth of colour to illustrate the sense of competence you had within each activity.

By the way, what are John's favorite colors ?

(Self-Determination Theory of motivation)

First, John likes very much blue color **(1)**

and yellow **(2)**

then, green **(3)**

but John doesn't like red **(4)**

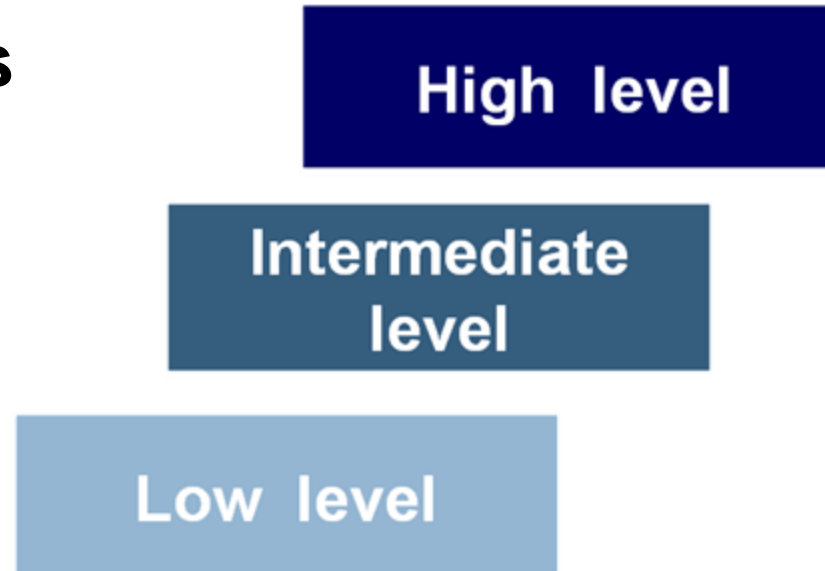**Edward Deci and Richard Ryan**

Self-efficacy versus efficacy

Unlike **efficacy**, which is the power to produce an effect — in essence, competence —

self-efficacy is the belief (whether or not accurate) that one has the power to produce that effect by completing a given task or activity related to that competency.
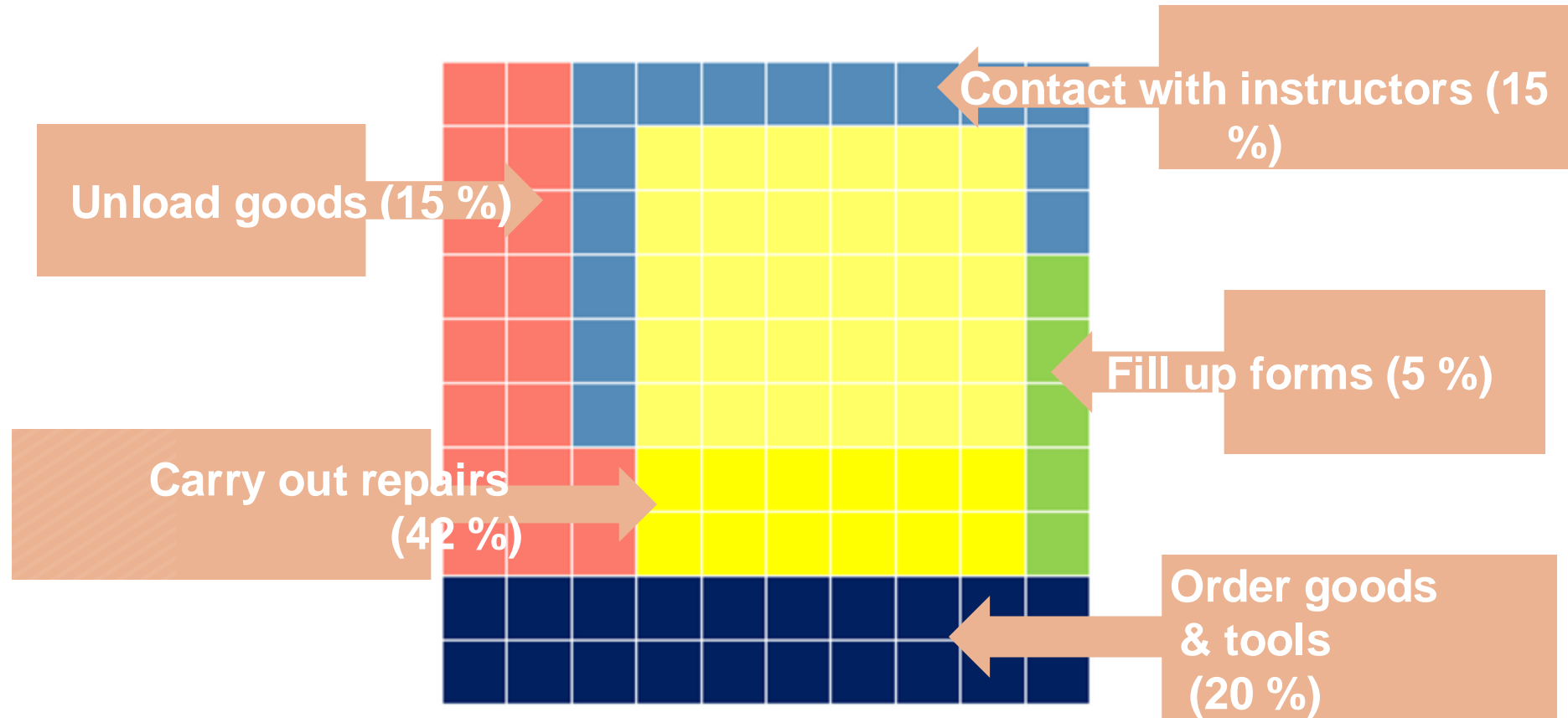
Albert Bandura

How high is John's self-efficacy level when performing an activity he likes ?

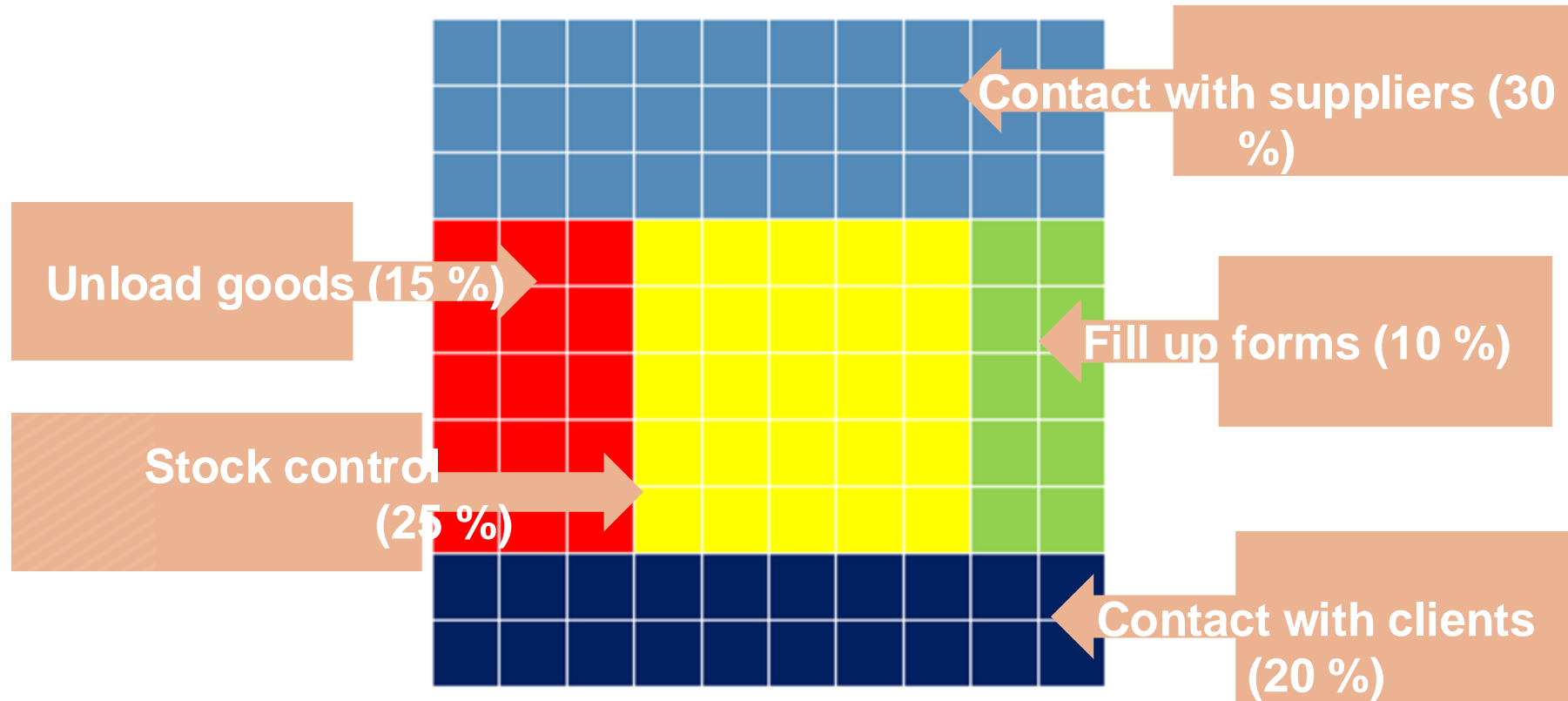**The depth of color used to make the Patchwork depends on the level of self-efficacy:**

so,
the darkest is the highest

High level

Intermediate level

Low level

How John designed the patchwork of his first job ?

Contact with instructors (15 %)

Unload goods (15 %)

Fill up forms (5 %)

Carry out repairs (42 %)

Order goods & tools (20 %)

John also designed the patchwork of his present job:

Contact with suppliers (30 %)

Unload goods (15 %)

Fill up forms (10 %)

Stock control (25 %)

Contact with clients (20 %)

Act II.
The untold story :

John was invited to design the patchwork of his spare time

Collecting books (30%)

Reading books (20 %)

Gardening with his wife (30 %)

Computer programming (28 %)

Sports (5 %)

Cooking (1 %)
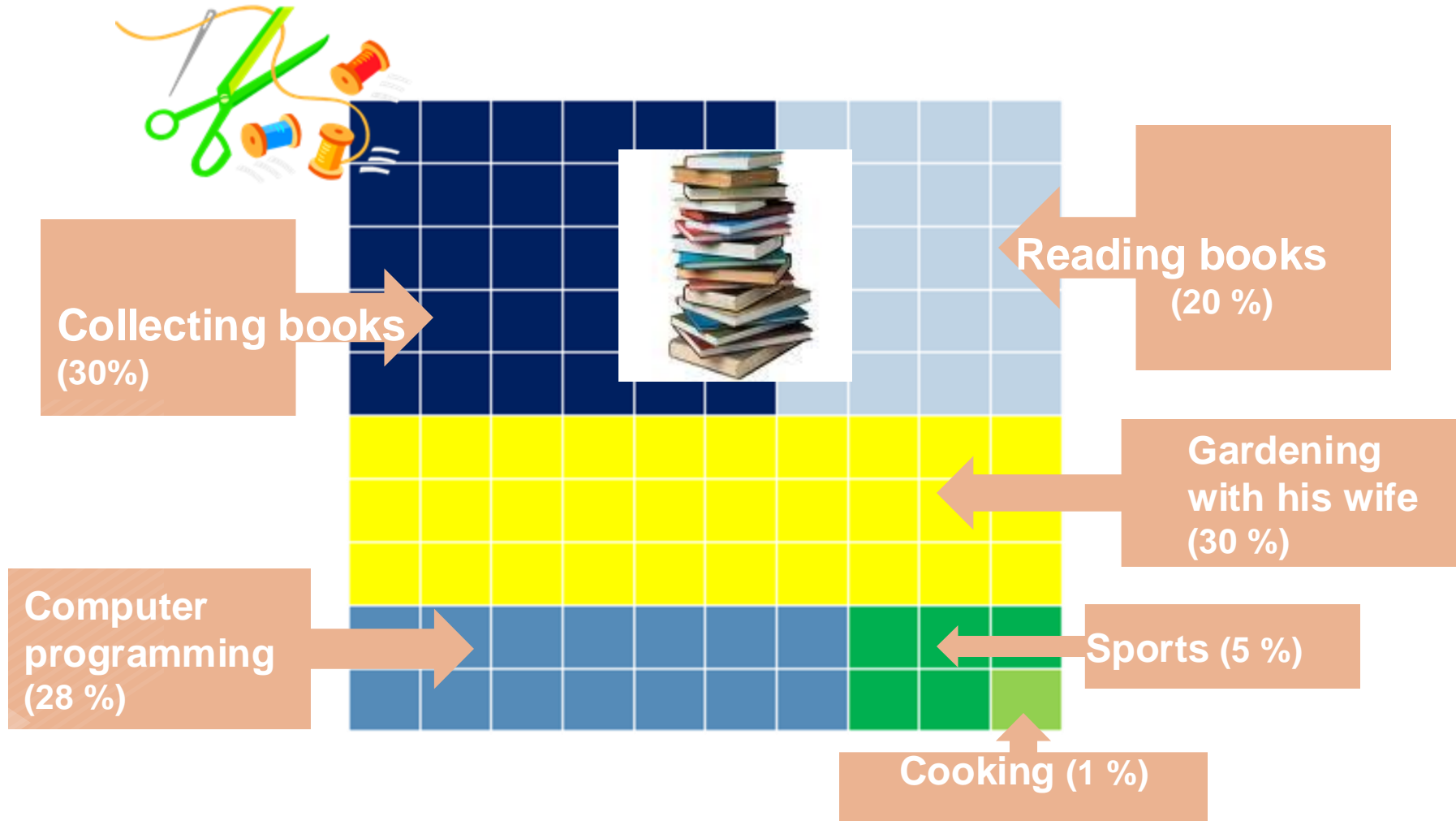
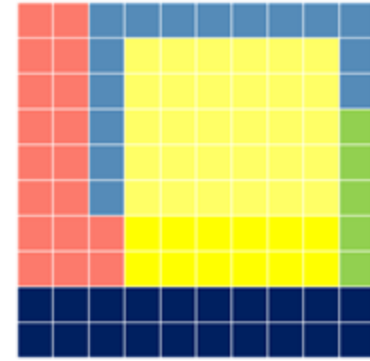# So, obviously,
John loves
the universe of books

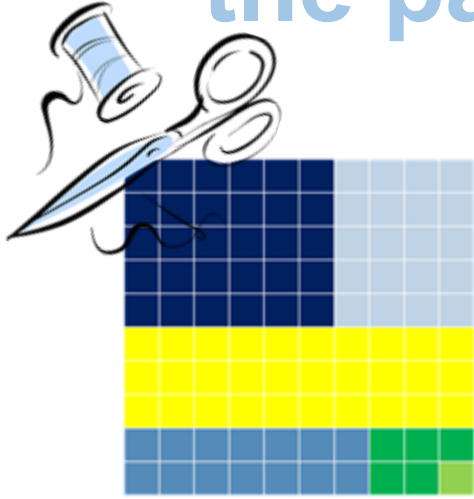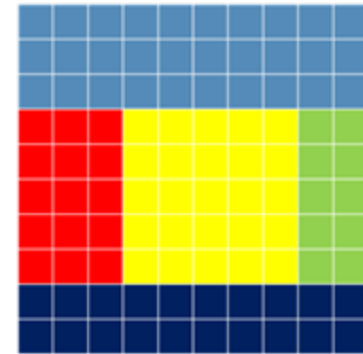# Act III.

The unknown or unrealised story :

Let's ask John to quilt an ideal patchwork with pieces taken from the patchworks he designed …

Ideal Patchwork

…and/or from other stuffs

The ideal Patchwork according to John:

Contact with clients (50%)

Contact with suppliers (24 %)
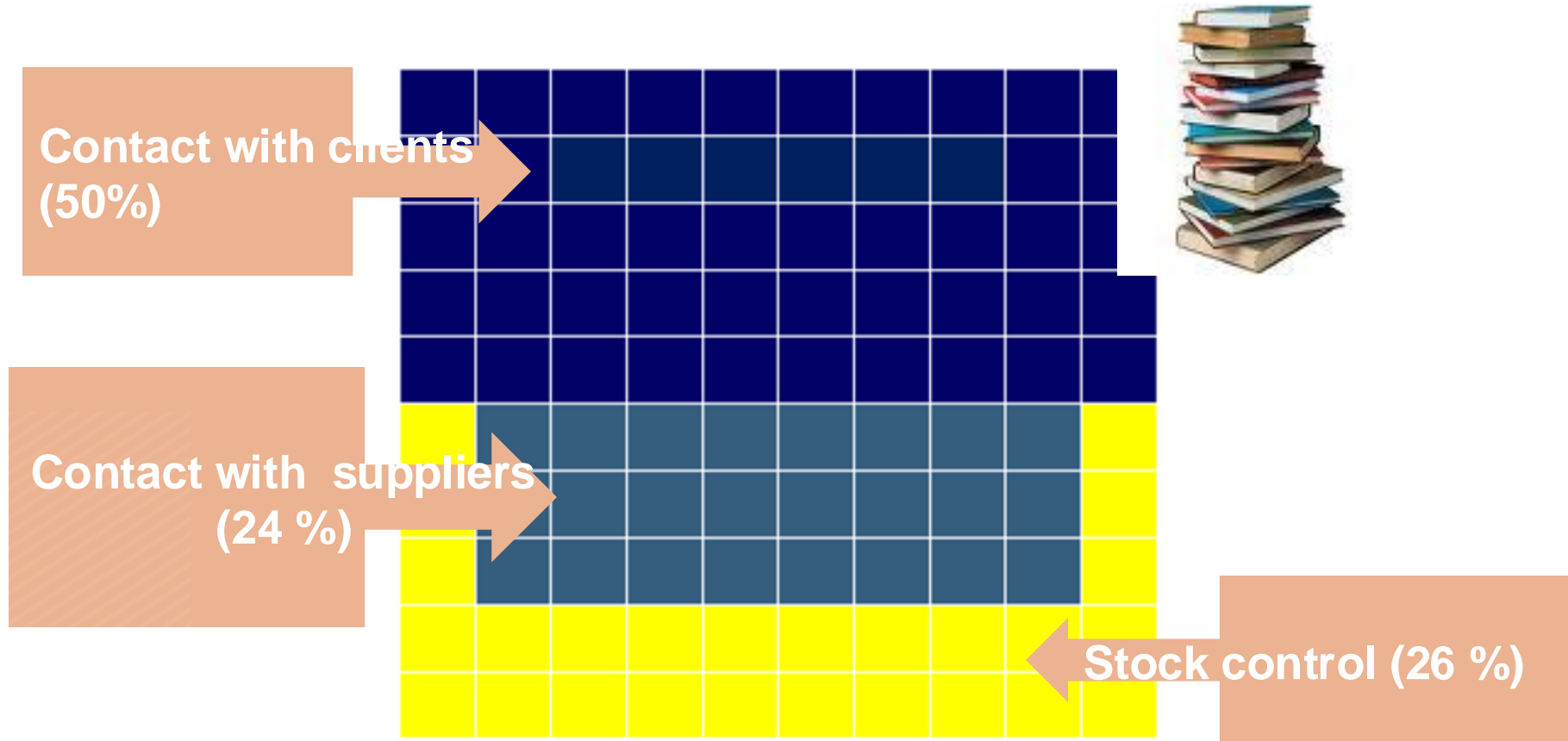
Stock control (26 %)

Act IV.
The future story :

But in connection with John's passion for books

Contact with clients (50%)

Contact with suppliers (24 %)

Stock control (26 %)

Act V.
The actual story :

Finally, John authorised himself to run his own business

Conclusion

Talents & transitions Patchwork® provides opportunities for individuals to:

➢ Explore their subjective career narratives
➢ Make links between past and present (span-life)
➢ Make links between different areas of life (space-life)
➢ Draw new insights and formulate new strategies that make sense
➢ Make plans for the future

The philosophy of the method

- Talents & Transitions Patchwork® conceptors view career as a holistic concept in which personal life and work are inseparetly intertwined.

- They consider individuals as experts in their own lives and in actively constructing their careers.

Please visit our website

https://www.ott-partners.eu/meacutethode-socio-constructiviste-talents-et-transitions-patchworkreg.html
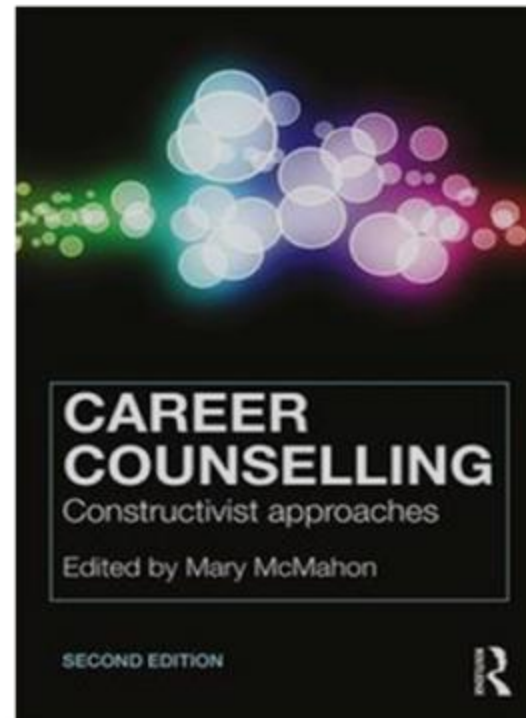
To use and implement the Talents & Transitions Patchwork®

please feel free to contact

OTT Partners
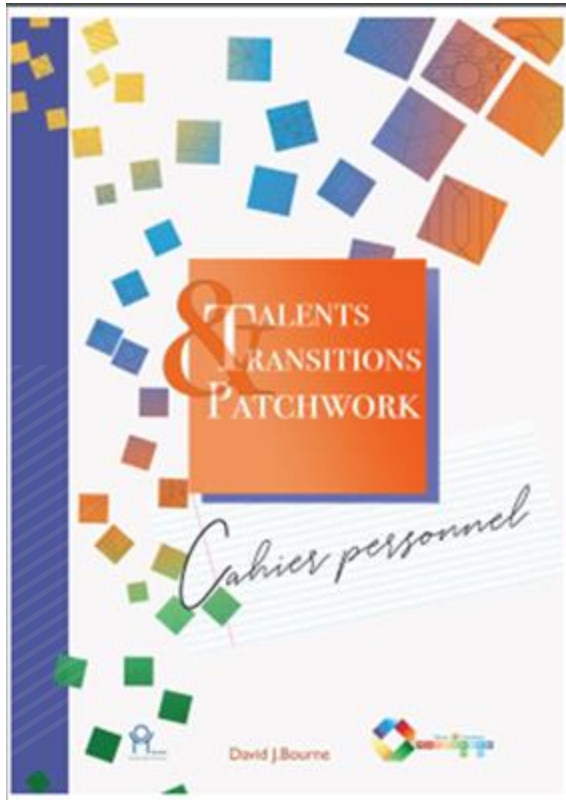
Thank you for your attention

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3. Empower your practice: integrate AI into career counselling routines

Rethinking career counselling - integrate AI into career counselling routines

Renewing and Future-Oriented Career Counselling

Society has changed, and career guidance must change with it.

As career counsellors, we must be aware of societal changes, including the possibilities and dangers of artificial intelligence.

(Global) Job profiles are evolving to match new types of jobs.

In addition to degrees, more continuing education and quick ways to update skill sets are needed.

The ability to learn new things is one of the most important work-life skills. Remote work has become more common, and there is no return to the previous norm in sight.

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How does this affect career counselling?

Artificial intelligence and augmented intelligence

Artificial intelligence refers to a machine's ability to use skills traditionally associated with human intelligence, such as reasoning, learning, planning, or creating. Source: europarl.europa.eu

Support intelligence is a branch of AI development where machine learning supports human intellectual resources.

Support intelligence, also known as "augmented intelligence," is technology that aims to enhance human ability to perform tasks more efficiently and accurately by combining the strengths of human and machine intelligence. This does not replace human intelligence but rather extends and supports it.

Source: https://www.freepik.com/ Retrieved 13.6.2024

Role of AI and Human Agency

How does a career counsellor renew their working methods by utilizing artificial intelligence?

It addresses the different modes of agency – personal, proxy, and collective – and the role AI can play in each.

The potential of AI as a tool, assistant, collaborator, and coach in the career guidance process is explored.

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The Impact of Artificial Intelligence and Automation on Work Life

IBM conducted a study in August 2023 based on interviews with over 3,000 business decision-makers. The executives who responded to the surveys estimate that 40% of their workforce will need retraining due to AI and automation over the next three years. This means 1.4 billion out of 3.4 billion workers worldwide. Reports also show that developing new skills for current employees is one of the most important challenges.

Source: IBM & https://www.finnishup.com

Source: https://www.freepik.com/ Retrieved 13.6.2024

Why is artificial or augmented intelligence needed in career counselling – or is it needed at all?

Experts need targeted information about the operational environment of the target country. Are career counsellors "up to date"?

Competition for skilled labor is tough. Career counselling (and strengthening job positions) can affect the sustainability of working life (attractiveness and retention, preventing brain drain).

How can we provide more relevant and effective career counselling?

Research shows that AI can enhance 40% of "basic work," and in some fields, it can even improve quality ("Smart Action" TIVI & CGI). What tasks could it handle in career counselling?

AI WIPS — WORK INNOVATION PRODUCTIVITY SKILLS

International Conference on AI in Work, Innovation, Productivity and Skills

Defining and classifying AI in the workplace

Artificial intelligence and labour market matching

Artificial intelligence offers,
for example,

assistance with routine tasks related to career counseling (such as preparing job application documents, matching employees with suitable employers, and proofreading academic transcripts).

However, it also brings cybersecurity risks and other unforeseen challenges if its uses and nature are not understood.

Come up with five challenges from your own work.

Don't think about AI.

TASK 1 DISCUSSION (15 min)

What challenges/problems do you have in your counselling work?

How has artificial intelligence been utilized in supporting studies and career counseling in the past?

- Artificial intelligence has been utilized more broadly in career counseling only in the last decade (e.g., Zaidi et al., 2021, Westman et al., 2021), but interest is continuously growing.

- Trained chatbots have often been the first step.

Source: https://www.freepik.com/ Retrieved 20.2.2024

Matching skill profiles with company needs using AI-powered tools and digital customized job searches are already commonplace.

How has artificial intelligence been utilized in supporting studies and career counseling in the past?

- Artificial intelligence has been utilized more broadly in career counseling only in the last decade (e.g., Zaidi et al., 2021, Westman et al., 2021), but interest is continuously growing.

- Trained chatbots have often been the first step.

Personalized Guidance: AI can analyze a vast amount of data about an individual, including their skills, interests, educational background, and work history, to provide personalized career recommendations. This personalized approach can be more effective than traditional one-size-fits-all advice.

Labor Market Analysis: AI can process and analyze large datasets related to job market trends, emerging industries, and future career prospects. This helps counselors provide informed advice on which career paths are likely to be in demand.

Skill Gap Analysis: AI can identify skills that are in demand for specific roles and compare them with an individual's current skill set. This helps in identifying any gaps and suggesting appropriate training or education to bridge them. FINLAND: ForeAmmatti, MunJob by using ESCO database etc. Match making

Interactive tools and Platforms: AI-powered tools and platforms can engage individuals in interactive ways, like career exploration games, virtual career fairs, and interactive Q&A sessions, making the career counseling process more engaging.

Ongoing Support and Follow-Up: AI systems can offer continuous support and follow-ups, checking in with individuals to track their progress and adjust recommendations as their career path evolves.

AI can provide **multilingual support** in career counseling, leveraging advanced natural language processing to communicate in various languages. For example APPLE , veed.io, The Bests , Amazon (works without internet also)

Practicing a job search situation with a chatbot. Artificial intelligence that is limited and trained for the interview can help you prepare effectively for the interview.

Digital work apply: Employer uses key words - identify skills and match and modify application with own data

Job search engines: For example, on Linkedin, Facebook and many job search robots, you can use algorithms and find jobs that match your skills. You can automate the job search to notify you when a suitable job opens.

AI can significantly enhance a CV by tailoring its content to specific job requirements, optimizing its format, correcting errors, and ensuring keyword optimization for Applicant Tracking Systems. It also provides feedback for improvement, refines language and tone, and offers personalization advice, although a human touch is still essential for conveying an individual's unique personality and career goals. (Novoresume, Canva, AI-apps inside)

Data-Driven Decision Making: AI can assist counsellors in making data-driven decisions, backed by extensive analysis and predictive modeling, rather than relying solely on intuition or limited information.

Accessibility and Scalability: AI enables career counseling services to be more accessible to a wider audience, breaking geographical and logistical barriers. It can provide assistance at any time, making it convenient for individuals with different schedules. Additionally, for individuals who may feel embarrassed to repeat certain questions, AI provides a non-judgmental and always-available resource for answers.

Bias Reduction: Properly programmed AI systems can help reduce human biases in career counselling. By focusing on data and objective measures, AI can suggest career paths that might not be considered due to conscious or unconscious biases.

Role of AI in Career Counselling

74

Empower your practice: integrate AI into career counselling

AI-augmented guidance has become technologically accessible.

Modes of AI in Career Counseling

- **AI as a counsellor**

Virtual career coach mentors students throughout life on career and educational choices. Personal learning aid proposes competence development methods based on previous performance and preferences.

- **AI as a collaborator**

Virtual online counsellor delivers 24/7 guidance alongside staff. Automated weak signals detection combines with staff interventions for dropout prevention.

- **AI as an assistant**

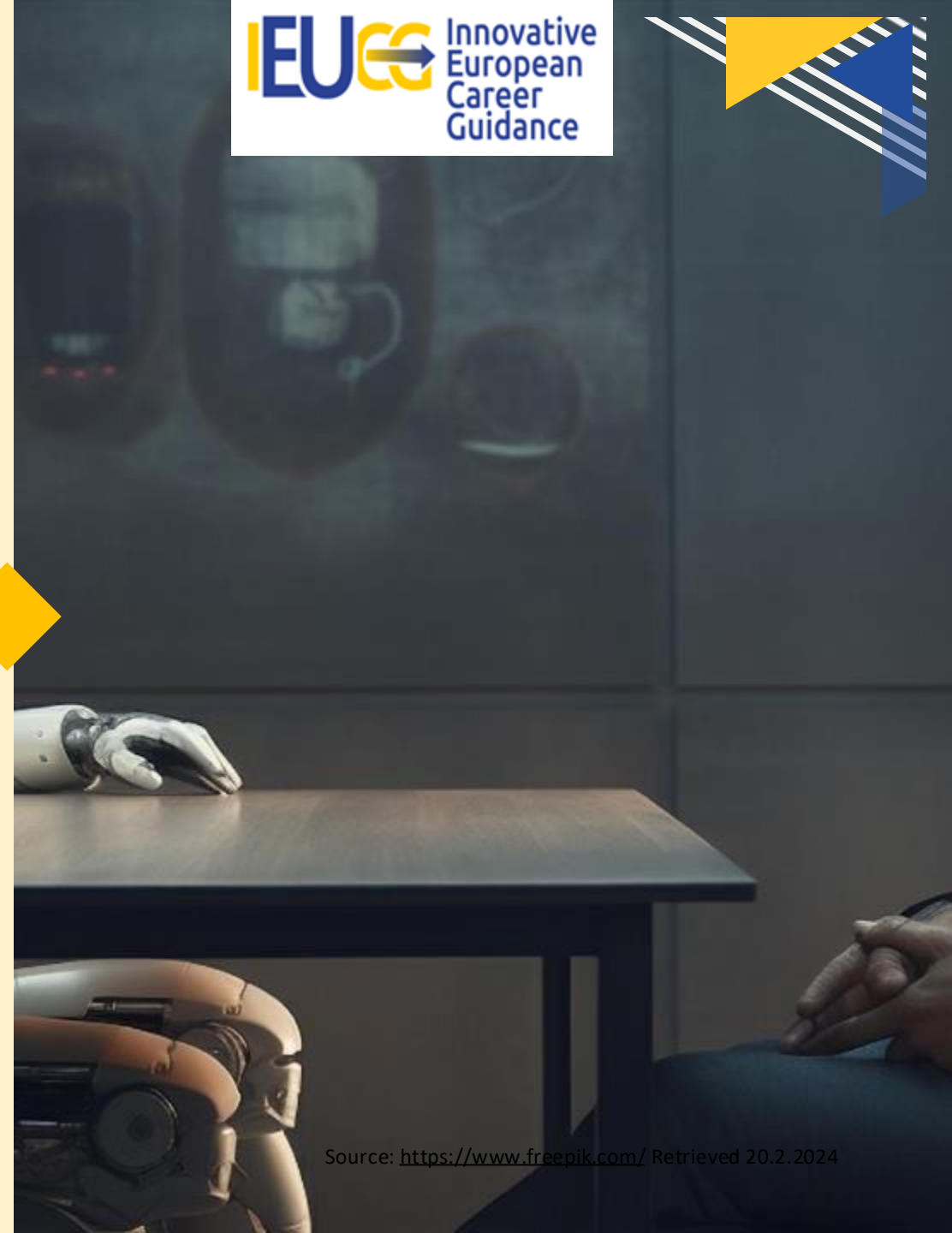Virtual assistant schedules meetings as needed between students and staff. Smart calendar app creates a study schedule based on enrolments and personal preferences

- **AI as a tool**

Discovery tool maps ads against a fixed skills profile for job recommendations. Dashboard collates labour market data for analysing future competence requirements for redesigning curricula.

Source: Westman et al. 2021

Career Guidance Information Environment

Personal information
Skills, competencies
Motives, interests, values
Goals, aims
Work history, expertise
References, recommendations

Innovative European Career Guidance

Educational information
Degrees and qualifications
Qualification requirements
Current study rights
Study records and grades
Funding and subsidies
Continuous learning
Career monitoring surveys
Thesis, publications
Open badges, microcredentials

AI as a Career Counsellor

Career information
Job advertisements
Recruitment process information
Professional practice rights
Labour market forecasts
Labour statistics
Skills anticipation data

Source: Westman et al. 2021

TURUN YLIOPISTO

Artificial Intelligence on a Counsellor's Desk, for example:

1. Visualizes and suggests actions (e.g., schedules counselling sessions).
2. Visualizes clients' competencies, interests, and career goals while adhering to data protection regulations.
3. Assists in making necessary interventions to support career planning.
4. Produces individual or group-specific visualizations for the counselor.
5. Helps draw conclusions from the generated data.
6. Provides information about other organizational guidance and wellness services.
7. Offers predictive information to support career planning.
8. Searches and organizes information about new career counseling tools and methods.
9. Visualizes statistical data on groups of students and their needs.
10. Visualizes career tracking information for the specific field.
11. Helps make structures visible.

(Westman 2021)

Utilizing Artificial Intelligence in the Growth of Employment Capital

Identity
- professional identities
- continuous development and investment to employability
- employability narratives

Psychological capital
- resilience and anti-fragility
- adaptability
- risk-taking, transfers, failures and face the challenges

Human capital
- degrees and qualifications
- career building skills
- skills matching

Social capital
- awareness and access to opportunities
- networks, contacts influencers, bonding activities

Cultural capital
- cultural awareness and confidence
- embodied behaviour and valuable knowledge
- variables and emphasis in algorithms

Source: Tomlinson 2017, Westman et al. 2021

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TASK 2
DISCUSSION (15 min)

- What kind of experiences do you have utilizing AI at work?
- Let's take out the list of challenges and together look for new solutions for using artificial intelligence in career counseling and higher education teaching.

Advantages of AI-Based Career Counselling

- Accessibility: 24/7 availability for users.

- Personalization: Tailored advice based on individual user queries.

- Cost-Effective access to professional advice.

- Accessible tools

- Improving student decision-making and reducing anxiety.

EXPLORE THE FUTURE
ARTIFICIAL INTELLIGENCE
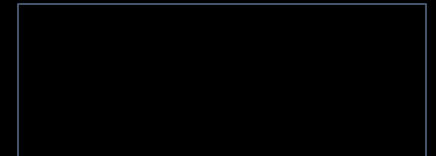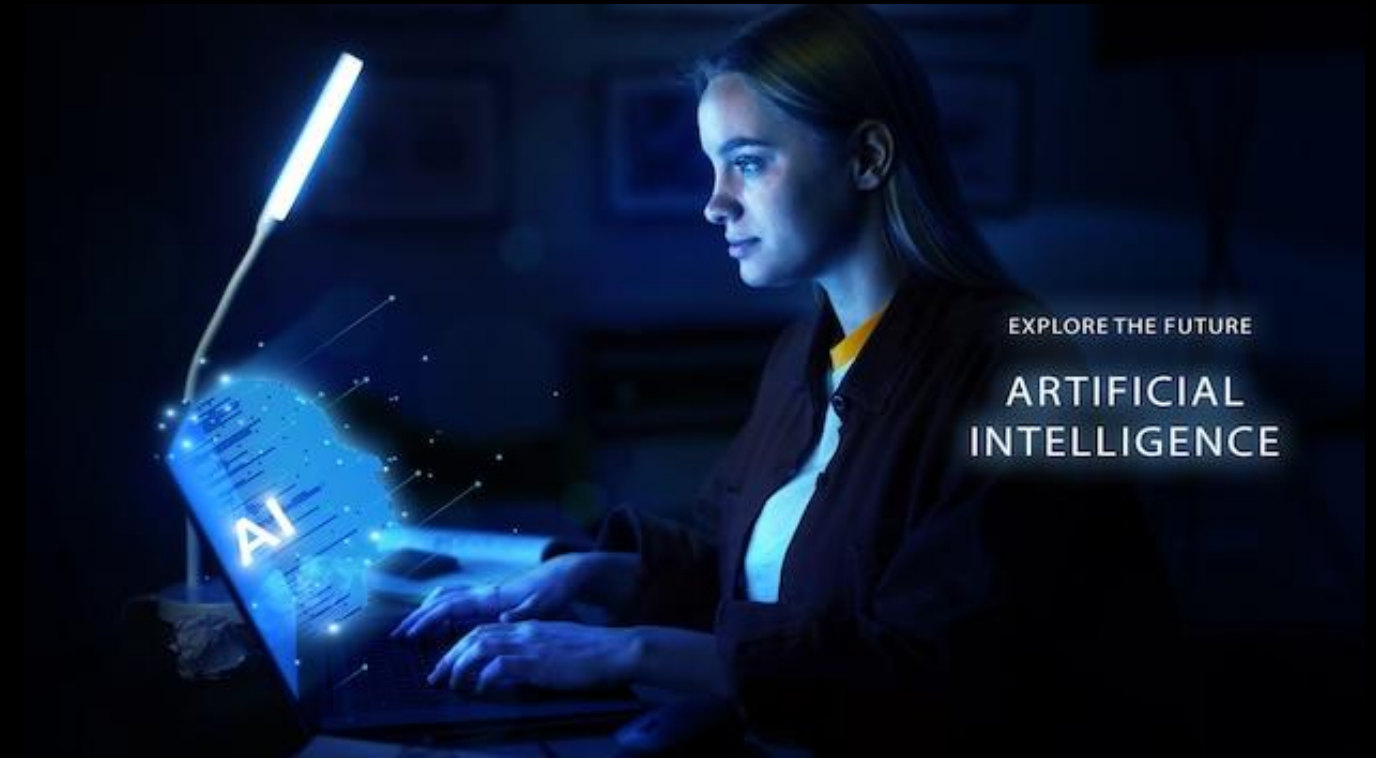
AI-powered career counselling tools, applications, and tasks

- Support for interaction (e.g., Enence etc.)

- Versatility and support for service production

- Strengthening student agency and individual study and career paths

- Development of meta-skills

- Availability, accessibility, and equality of guidance

- Effectiveness

- The ethical and functional connection of technology and guidance in the counseling process

- Guidance, information, counseling

(Westman 2021)

TRANSVERSAL | CORE

AI Domain	AI Subdomain
Reasoning	Knowledge representation
	Automated reasoning
	Common sense reasoning
Planning	Planning and Scheduling
	Searching
	Optimisation
Learning	Machine learning
Communication	Natural language processing
Perception	Computer vision
	Audio processing
Integration and Interaction	Multi-agent systems
	Robotics and Automation
	Connected and Automated vehicles
Services	AI Services
Ethics and Philosophy	AI Ethics
	Philosophy of AI

Samoili, S.,et al (2020) AI Watch. Defining Artificial Intelligence. Towards an operational definition and taxonomy of artificial intelligence, EUR 30117 EN, Publications Office of the European Union, ISBN 978-92-76-17045-7, doi:10.2760/382730, JRC118163.

AI Maturity in Career Counselling

- AI-transformed counselling

- AI-integrated counselling

- AI-informed counselling

- AI-aware counselling

Source: Westman et al. 2021

Sample 1: Career Counselling Chatbot

Chatbot System for Career Counselling helps users to choose the steps in their career path. Chatbot is helpful for the client for reducing anxiety, help and guide them without any fee as it is 24/7 available. It will provide the most accurate answer as the answers are based on research and most of the answers are from the most relevant websites. This will help to choose the best for the future and the most suitable career path.

HOW CAN A BOT HELP?
✓ Offers versatile information.
✓ You won't miss important points of view.
✓ Don't get tired of answering.
✓ It is always available.
✓ It's unhurried.
✓ Social bots in the workplace increase comfort (research is found).
✓ They can be fun, too.
✓ You can direct routine work to them.
✓ Less stress, no need to be shamed

(Zaidi & Sharma 2021)

Sample 2

AI in seeking hidden jobs matchmaking

In the competence data ecosystem, actors produce, enrich, share and utilize competence data about people's competence, the competence needs of organizations and the competence supply of educational institutions.

Competence data

Ecosystems

Humans

Educators

Organizations
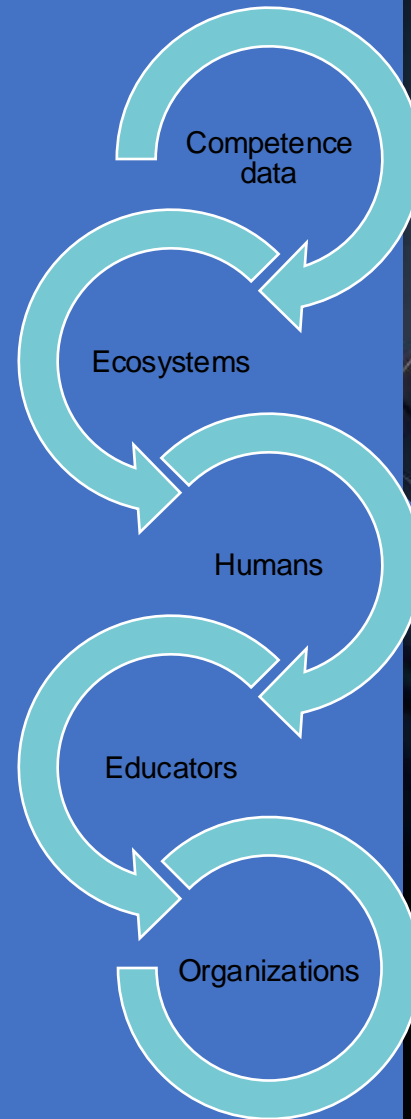
Sample 2: Skills Profile Creation and Matching for Job Opportunities

Application: A web application was used to create detailed skills profiles for students. This application helped students compile their CVs and input skills, resulting in a comprehensive skills profile.

Functionality: The AI system matched students' skills profiles with available job ads and courses, refining its suggestions based on the skills gap analysis. This approach aimed to offer more accurate and personalized recommendations.

User Experience: Students could explore and understand the skills requirements of various professions, aiding them in career planning. The application allowed for continuous updating and refining of skills profiles based on new learning or experiences.

ESCO-database, SkillsMap, MunJob, Workseed, Reactored, Duunikoutsi, Foreammatti, Career Bot https://www.3amk.fi/careerbot-2/

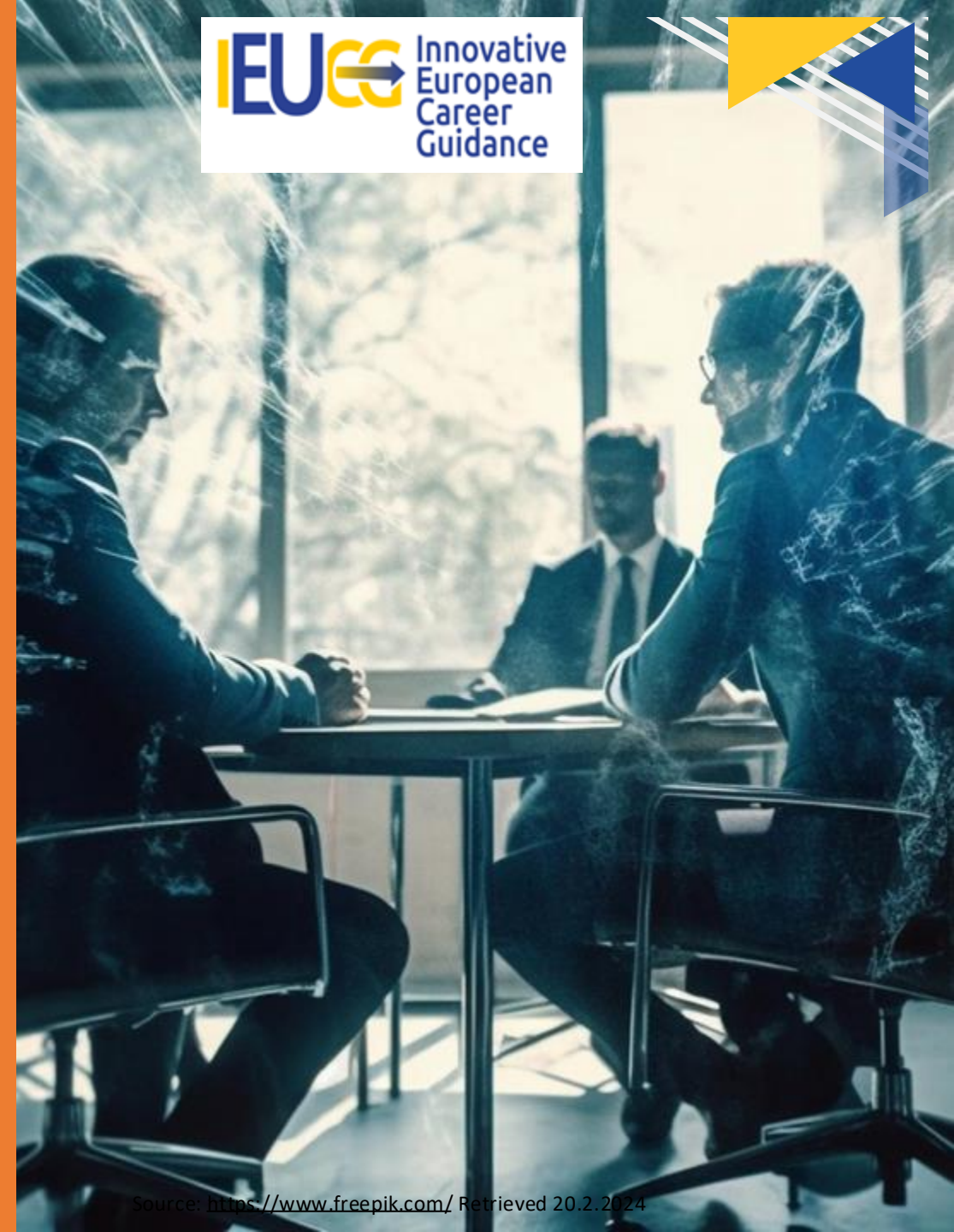# How AI can help in networking while seeking hidden jobs?

- **Professional Network Analysis**: AI can analyze your existing professional networks to identify key individuals who could provide job leads or referrals, highlighting connections you may not have considered.
- **Recommendation of Potential Contacts:** Based on your career goals and industry, AI can suggest potential new contacts, such as industry leaders or peers in your field, and facilitate introductions.
- **Social Media Insights:** AI tools can scan social media platforms and professional networking sites like LinkedIn to identify trending topics, influential people in your industry, and potential networking events.
- **Personalized Networking Strategies:** AI can tailor networking advice and strategies based on your career objectives and the specific dynamics of your industry.
- **Automated Follow-Ups:** AI can remind you to follow up with new contacts at optimal times, helping to maintain and strengthen your professional relationships.
- **Event Recommendations:** AI can suggest relevant networking events, webinars, or conferences based on your interests and professional needs.

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Sample 3: AI-Enabled Course and Job Recommendations

- **Application:** An AI application was developed to suggest courses and job opportunities to students based on their current academic records and enrollment information.
- **Functionality:** The AI system utilized students' personal data, curriculum data, and job ads from various public and commercial web portals. It combined machine learning and data mining techniques to provide personalized course and job recommendations.
- **Student Interaction:** Students received notifications through a mobile app. They could give feedback on the relevance of the suggestions, allowing the AI system to refine its future recommendations.

(Zaidi & Sharma 2021)

Sample 4: Scenarios

- The project Career guidance for the work of the future (2019-2021) developed scenarios that career counselors can use in their work.

The draft of scenario-based working

Area of career counselling:
Need for guidance:
Scenario for the use of artificial intelligence:
Employment capital which is affected by:
Required information:
An example of a service related to the scenario:

Source: https://www.xamk.fi/en/research-and-development/career-guidance-for-the-work-of-the-future/

Sample 4: In practice

Area of career counselling: Supporting the supervision relationship (Kuurila 2014)

The need for guidance: With the help of artificial intelligence, the aim is to improve the interaction between the learner and the instructor.

What kind of guidance is meaningful? What are the goals of guidance? How is common understanding built? How exactly does the control meet my needs? What makes me think?

From the career counselor's point of view: How do I approach the student? How do I tailor guidance to the student?

Scenario for the use of artificial intelligence:

Artificial intelligence can be used to prepare for guidance discussions, to summarize and analyze guidance discussions, or to support the self-evaluation of guidance methods.

Source: https://wiki.eduuni.fi/x/6deKCg

Can AI use for practicing career counselling?

- **Simulating Counselling Scenarios**: AI can create realistic, interactive simulations for counselors to practice their skills, including building rapport, understanding client needs, and effective communication.

- **Providing Feedback:** AI can analyze interactions and provide feedback to counselors on their approach, helping them refine their techniques in establishing and maintaining a working alliance.

- **Enhancing Communication:** AI can assist counsellors in understanding and responding to clients' needs more effectively by analyzing language and emotions, thereby strengthening the counselor-client relationship.

- **Goal Setting and Monitoring:** AI can help in setting realistic career goals with clients and monitoring progress, thereby facilitating a key aspect of the working alliance.

90

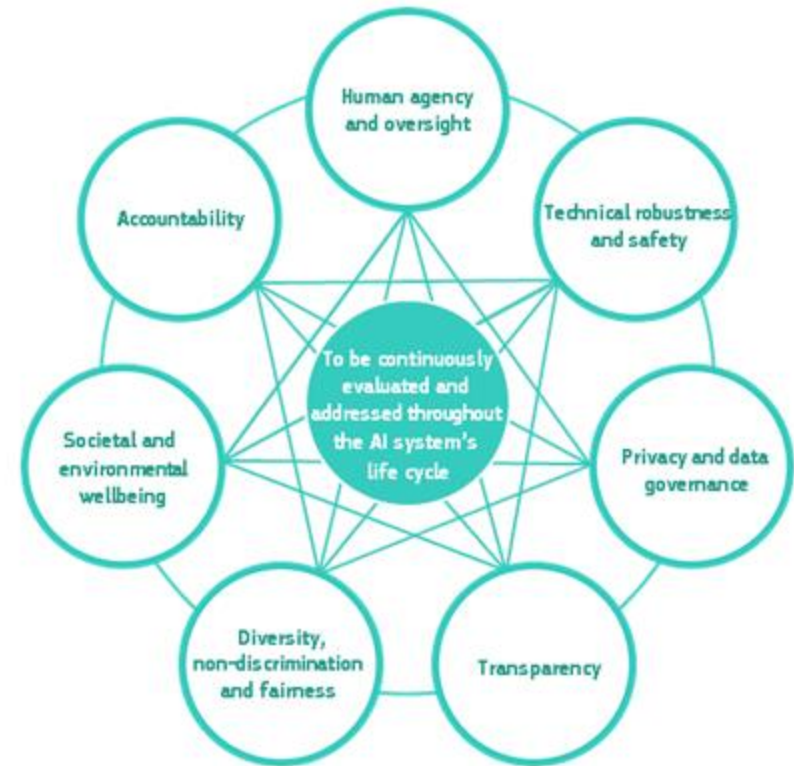# Limitations and Ethical Principles Related to Artificial Intelligence

Is the service accessible to everyone?

Can an individual decide which personal data is used?

How is artificial intelligence learning monitored?

What effects do artificial intelligence solutions have on human life?

Do the outputs of artificial intelligence solutions promote equality?

Ethics guidelines for trustworthy AI | FUTURIUM | European Comission

https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai)

Challenges and Future Directions

Multilingual support and improved accuracy

The balance between technology and human intervention in career guidance. The importance of data quality, ethical considerations, and the development of AI-related competencies are crucial

Interaction between agency and guidance

Developing a guidance data ecosystem

Addressing ethical issues in AI-enhanced career guidance services.

Current needs and future prospects

Technology is not just a tool in guidance, as it has the potential to extend and transform services and practices. AI can serve students and staff in different ways within careers services, depending on user needs, staff competencies and organisational capacity to use technology.

- Artificially enhanced counselling services include guidance interaction
- Developing an ecosystem of guidance data
- Ethical issues

Source: https://www.freepik.com/ Retrieved 20.2.2024
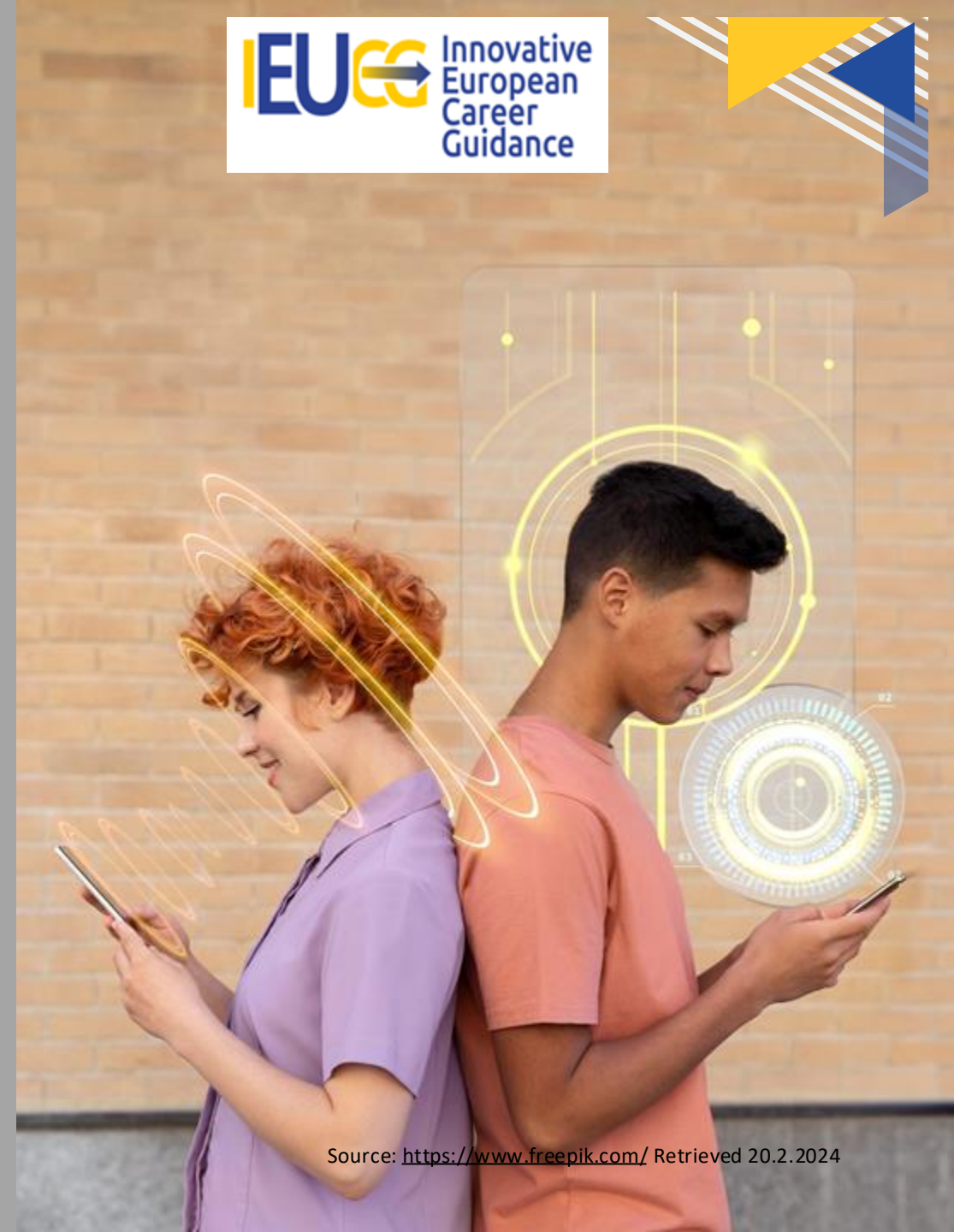
Conclusion

- The role of AI in revolutionizing career counselling.

- The potential benefits for students in making informed career choices.

- Artificial Intelligence is
  - an object of learning
  - a tool for collaboration in guidance
  - part of the structural change in working life
  - a special issue in the operational environment (e.g., ethical issues)

Career counsellors must establish their own personal relationship with artificial intelligence as a colleague or a tool, and justify its use.

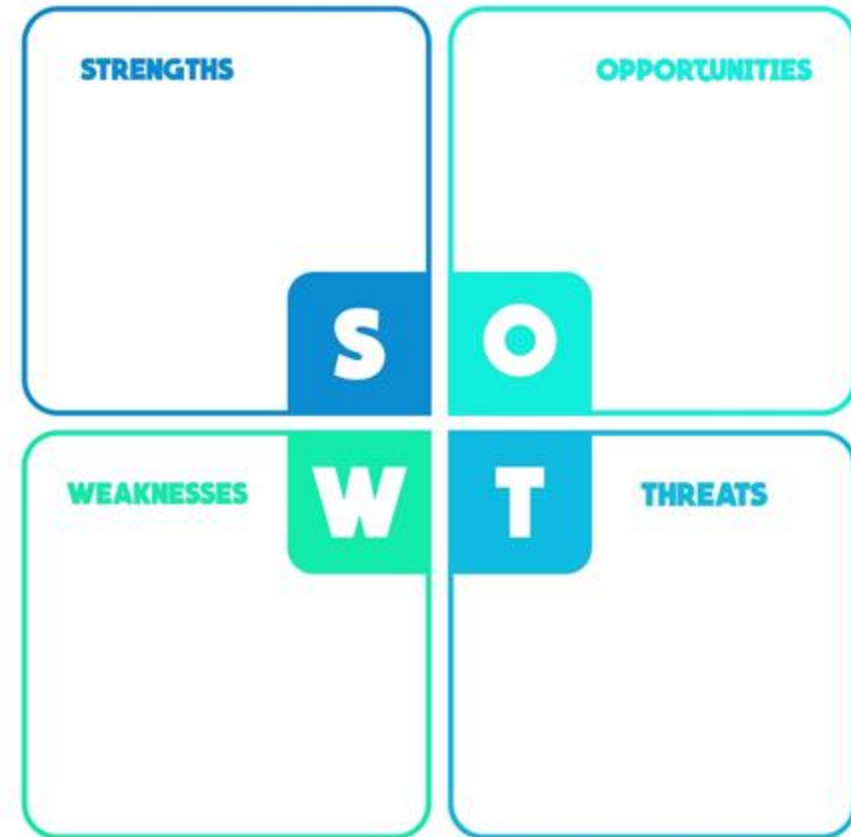Source: https://www.freepik.com/ Retrieved 20.2.2024
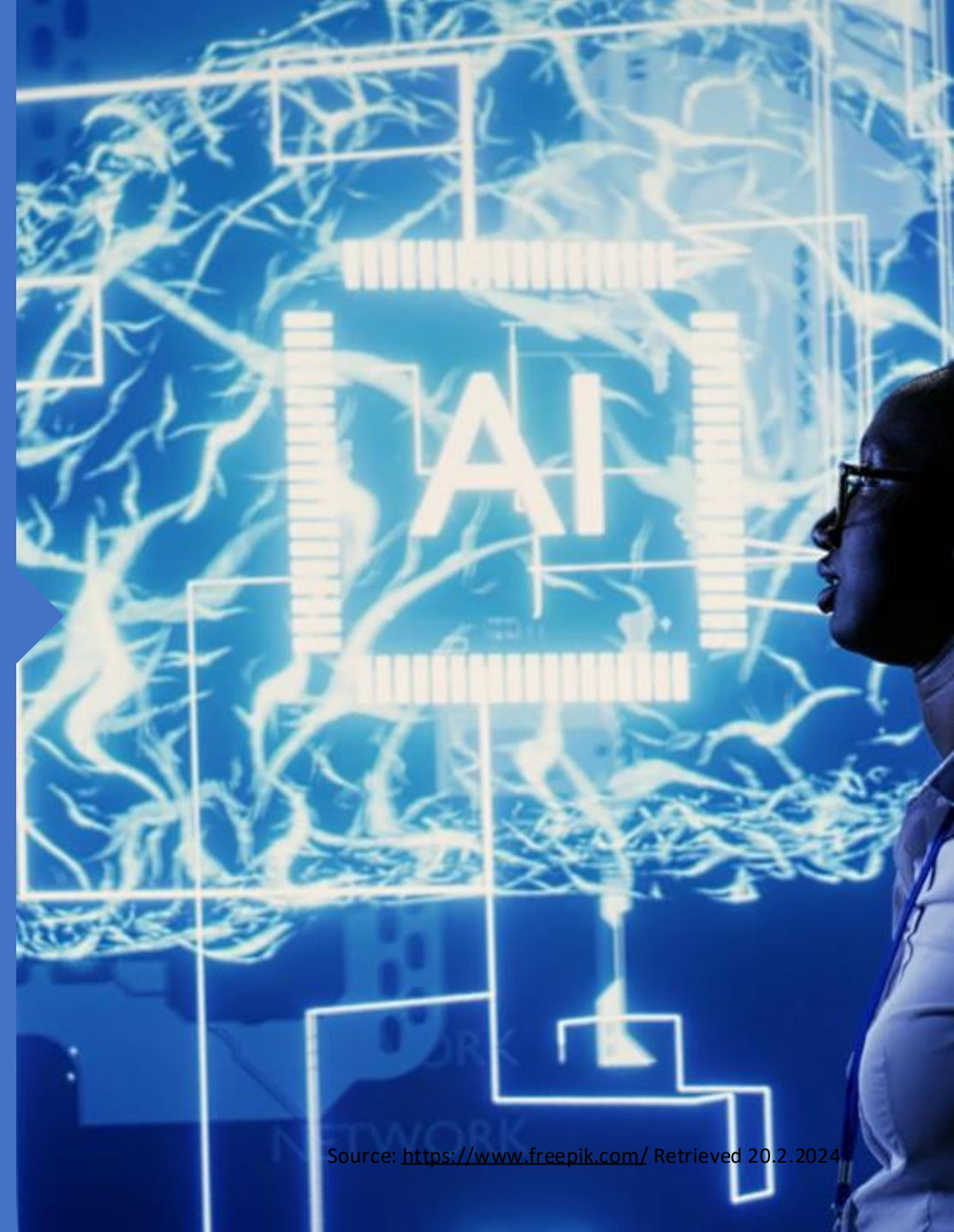
Task 3.

How can artificial intelligence be used in career guidance?

Rethinking career counselling by design thinking: how to integrate AI into career counseling routines?

- Design
- Demonstrate
- Evaluate

Task 3. Design

- Describing and illustrating personal competencies using artificial intelligence

- Identifying skills (e.g., the ESCO database recognizes traditional skills, but what about future skills?)

- Adapting documents to suit various cultures

- Describing the profession

- Conducting information searches

- Creating presentations and videos

- What should a career counselor know about artificial intelligence?

- What are the advantages and benefits of AI in your work?

- What are the risks associated with the use of artificial intelligence? (e.g., cybersecurity and ethical risks)

Task 3: Demonstrate

Perform your reflection

- Choose an AI tool you wish to experiment with

- Instruct and compare the responses you receive using prompts

Source: https://www.freepik.com/ Retrieved 20.2.2024

Task 3: Evaluate

- Reflect the scenarios

- Demonstrate the application of AI in a career counselling meeting

- Evaluate the demonstration and scenarios according to feedback and customer demands

Task 4. Benefits and lacks of AI

Test your organizational generative AI model or free versions.

Do you get relevant information by using AI?

What kind of lacks and benefits you recognize?

Personal information
Skills, competencies
Motives, interests, values
Goals, aims
Work history, expertise
References, recommendations

Educational information
Degrees and qualifications
Qualification requirements
Current study opportunities
Study records and grades
Continuous learning
Funding and subsidies
Career monitoring surveys
Thesis, publications
Open badges, microcredentials

Career information
Job advertisements
Recruitment process information
Regulated professional practice rights
Labour market forecasts
Labour statistics
Skills anticipation data

Read more

Working alliance - Constructivist approach

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Erasmus+ Cooperation Partnership in Vocational Education and Training

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