

ONLINE LEARNING PREFERENCES OF PHYSIOTHERAPISTS GUIDING THE DEVELOPMENT OF MULTIMEDIA KNOWLEDGE TRANSLATION INTERVENTIONS

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Why do we have academic journals?

“Impart their knowledge to one another and contribute what they can to the Grand design of improving natural knowledge and perfecting all Philosophical Arts and Sciences.”

– Henry Oldenburg, March 6, 1665 (in the first ever academic journal)



Why do we have academic journals?

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17 years = 14% implemented

Is this effective???



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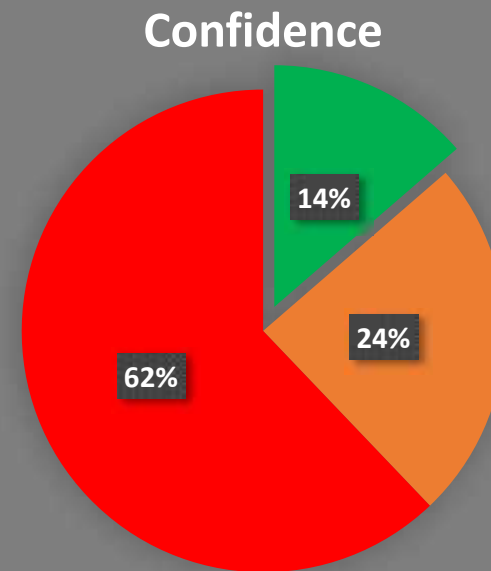
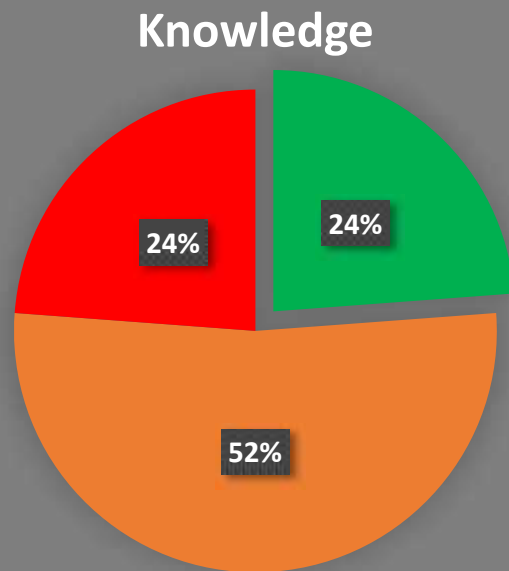
The 'Best Practice Guide to Conservative Management of Patellofemoral Pain': incorporating level 1 evidence with expert clinical reasoning

Christian John Barton,^{1,2,3,4} Simon Lack,¹ Steph Hemmings,¹ Saad Tufail,¹ Dylan Morrissey⁵

EDUCATION	ACTIVE REHABILITATION	PASSIVE INTERVENTIONS
<ol style="list-style-type: none"> 1. Ensure patients understand potential contributing factors to their condition and treatment options 2. Advise about appropriate activity modification 3. Manage patients expectations regarding rehabilitation 4. Encourage and emphasise the importance of participation in active rehabilitation 	<p><u>Principles</u></p> <ol style="list-style-type: none"> 1. Give preference to CKC exercises to replicate function 2. Consider OKC exercises in early stages of rehabilitation to target specific strength deficits and movements 3. Provide adequate supervision in the early stages to ensure correct exercise techniques, but progress to independence as soon as possible 4. When independent, limit the number of exercises to 3 or 4 to aid compliance 5. Use biofeedback such as mirrors and videos to improve exercise quality <p><u>Specifics</u></p> <ol style="list-style-type: none"> 1. Incorporate quadriceps and gluteal strengthening 2. Target distal and core muscles where deficits exist 3. Consider stretching, particularly of the calf and hamstrings, based on assessment findings 4. Incorporate movement pattern retraining, particularly of the hip 	<p><u>Pain reduction</u></p> <ol style="list-style-type: none"> 1. Provide tailored patellar taping to reduce pain in the immediate term 2. Consider PFJ braces where taping is inappropriate (e.g. skin irritation) 3. Consider foot orthoses <p><u>Optimising biomechanics</u></p> <ol style="list-style-type: none"> 1. Consider foot orthoses based on assessment findings (i.e. presence of excessive dynamic pronation) 2. Consider massage and acupuncture/dry needling to improve the flexibility of tight muscle and fasciae structures, particularly laterally 3. Consider PFJ mobilisation but only in the presence of hypo-mobility 4. Consider mobilisation of the ankle and first ray in the presence of sagittal plane joint restriction

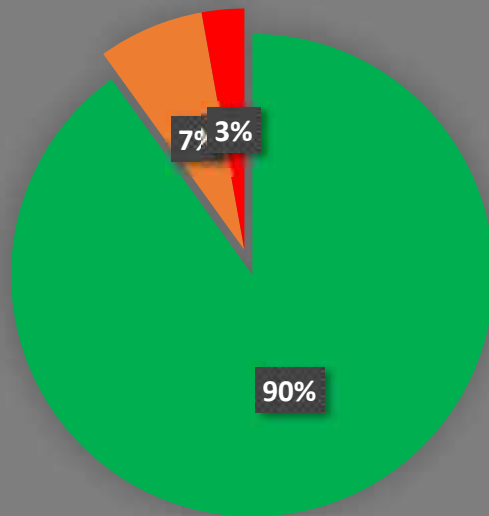


Foot orthoses knowledge and confidence (10 years on)

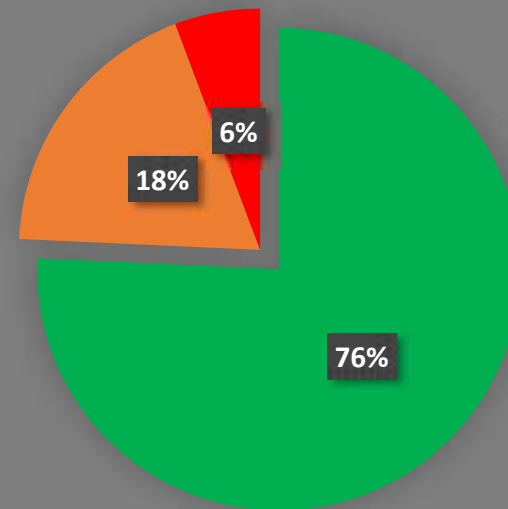


Knee exercise therapy

Knowledge

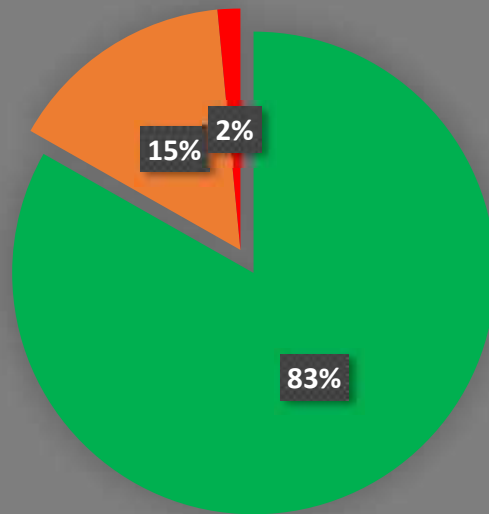


Confidence

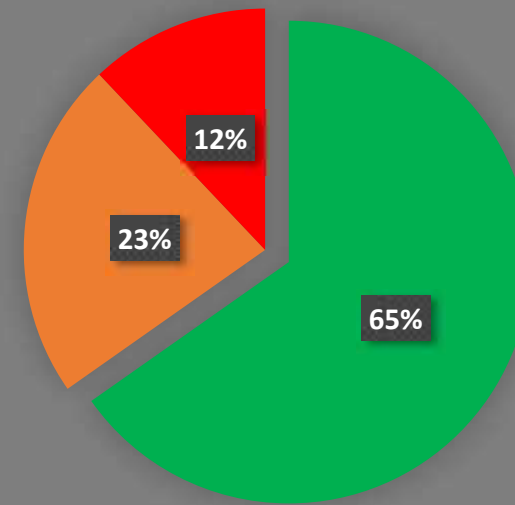


Hip exercise therapy

Knowledge

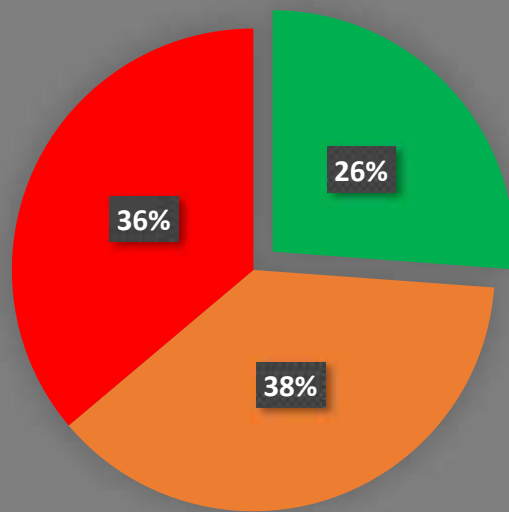


Confidence

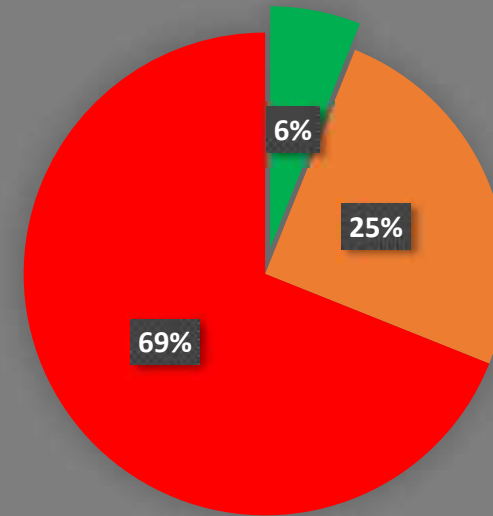


Passive treatments

Ultrasound Knowledge

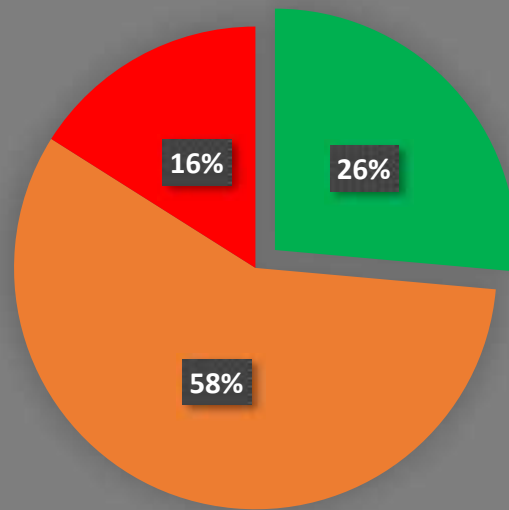


Mobilisation Knowledge

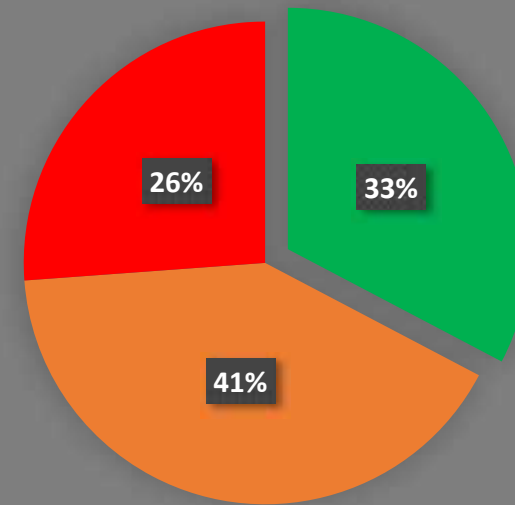


Knee arthroscopy

Knowledge PFP



Knowledge Knee OA



Meet Rhys

31 Years of age

PFP since adolescence

8 surgeries to right knee

2 surgeries to left knee



Meet Rhys

31 Years of age

PFP since adolescence

8 surgeries to right

2 sur

**Rhys needs the right guidance with an
EXERCISE PROGRAM**



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Time to reflect?

10 years

16 studies

10 reviews

1 Best Practice

1 consensus statement

It is time to INNOVATE!



What next?



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What next?



New formats – more digestible information



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What next?



New formats – more digestible information

Freely available



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Engage patients and clinicians



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MOOC – Physical Activity



- Approximately 2000 physios around the world
- 6 week course

Objectives

- Week one - Basic principles of the relationship between exercise and health
- Week two - Global perspectives on physical activity
- Week three - Physical activity in chronic illness
- Week four - Physical activity in specific conditions
- Week five - Integrating physical activity into clinical practice
- Week six - Becoming a physical activity leader

323 physiotherapists from 67 countries completed survey



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What resources do physios prefer?

Podcasts

Face to face workshops

Images

Written summaries

Original research articles

Video

Infographics



■ 1st Preference
■ 5th Preference

■ 2nd Preference
■ 6th Preference

■ 3rd Preference
■ 7th Preference

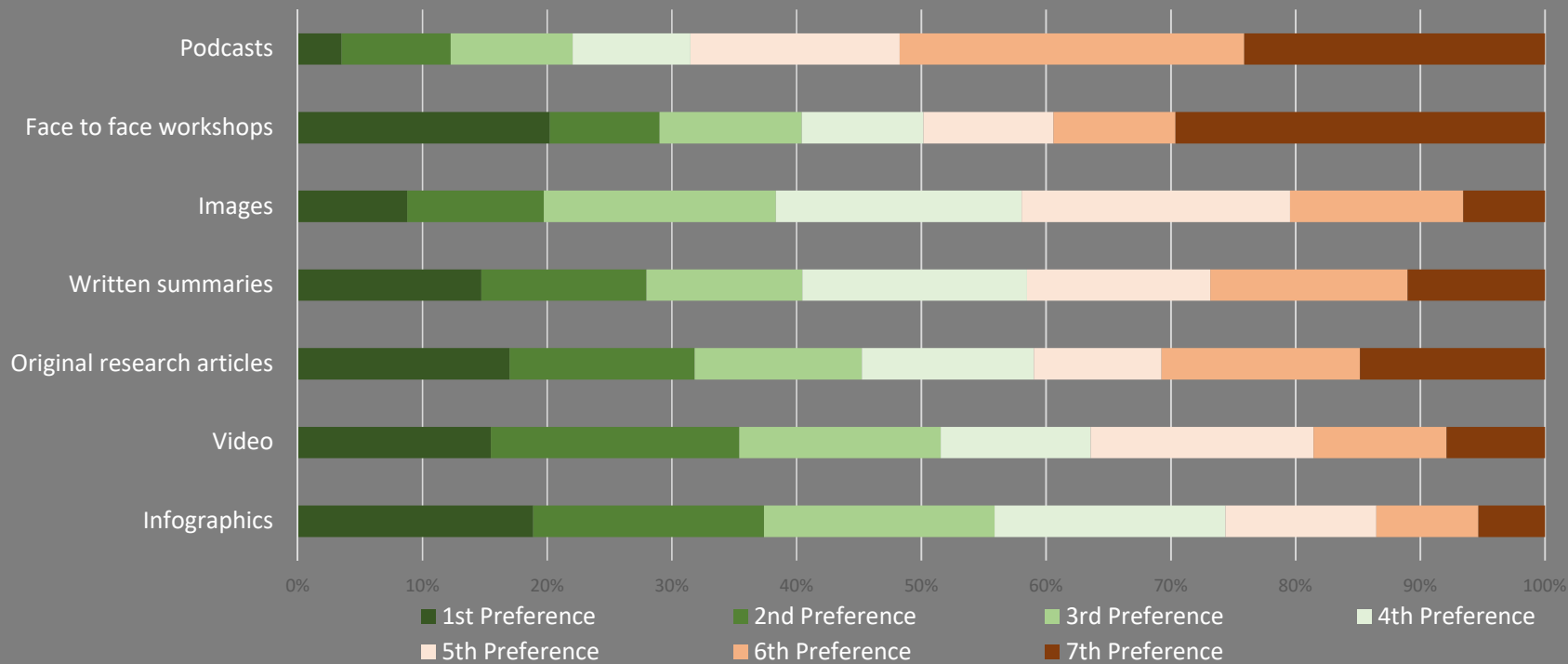
■ 4th Preference



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What resources do physios prefer?



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“How useful do you find the following resources to meet your learning needs?”



■ Very useful ■ Useful ■ Not useful

Multimedia	Images and graphs	Videos	Original articles	Written summaries	Book Chapters	Quizzes	Literature search activities	Discussion forums	

Passive Interventions



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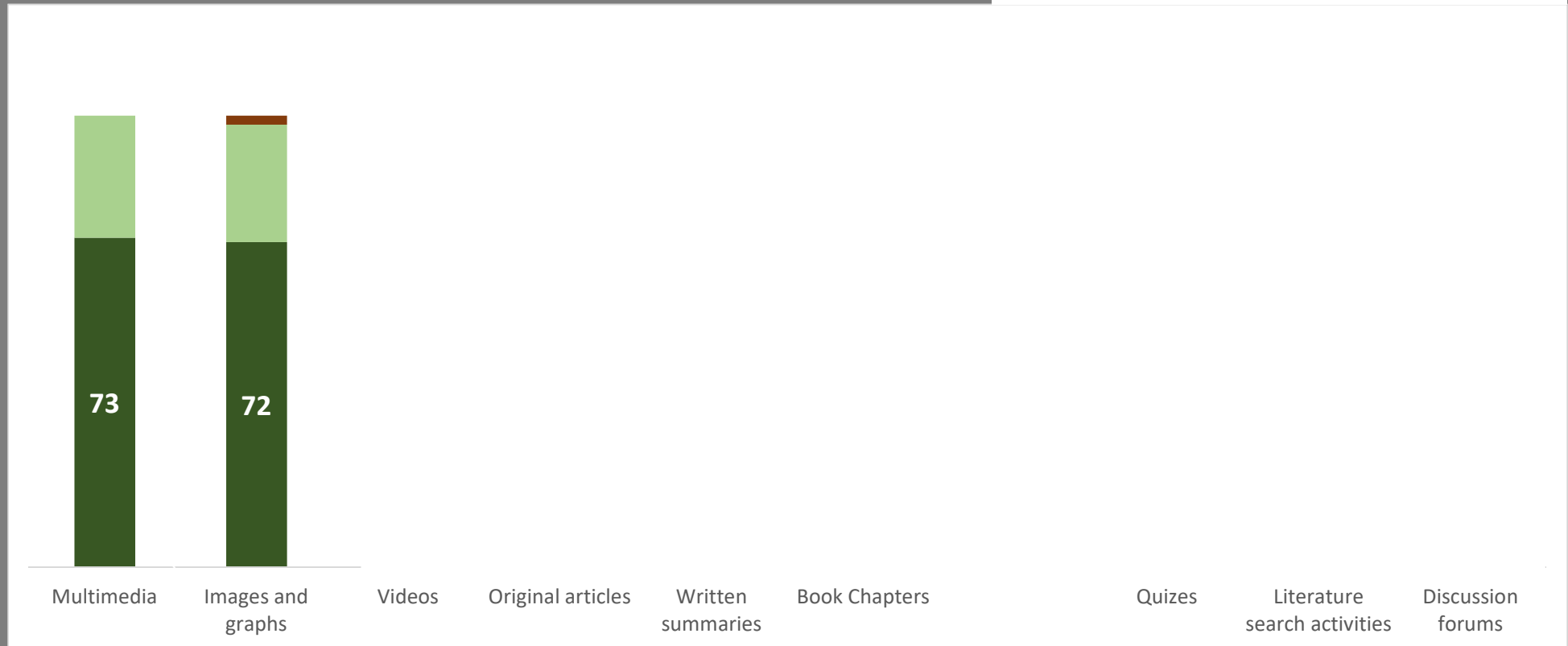
Active Interventions

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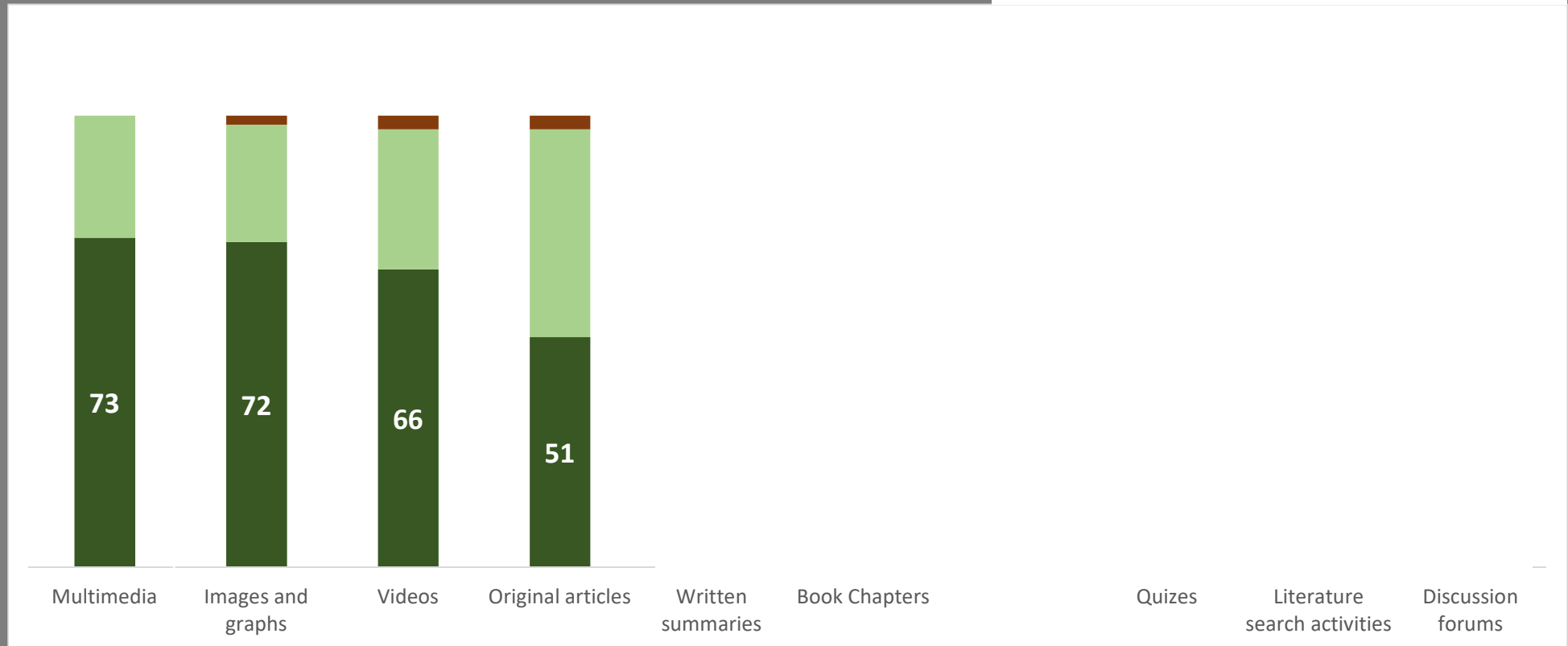
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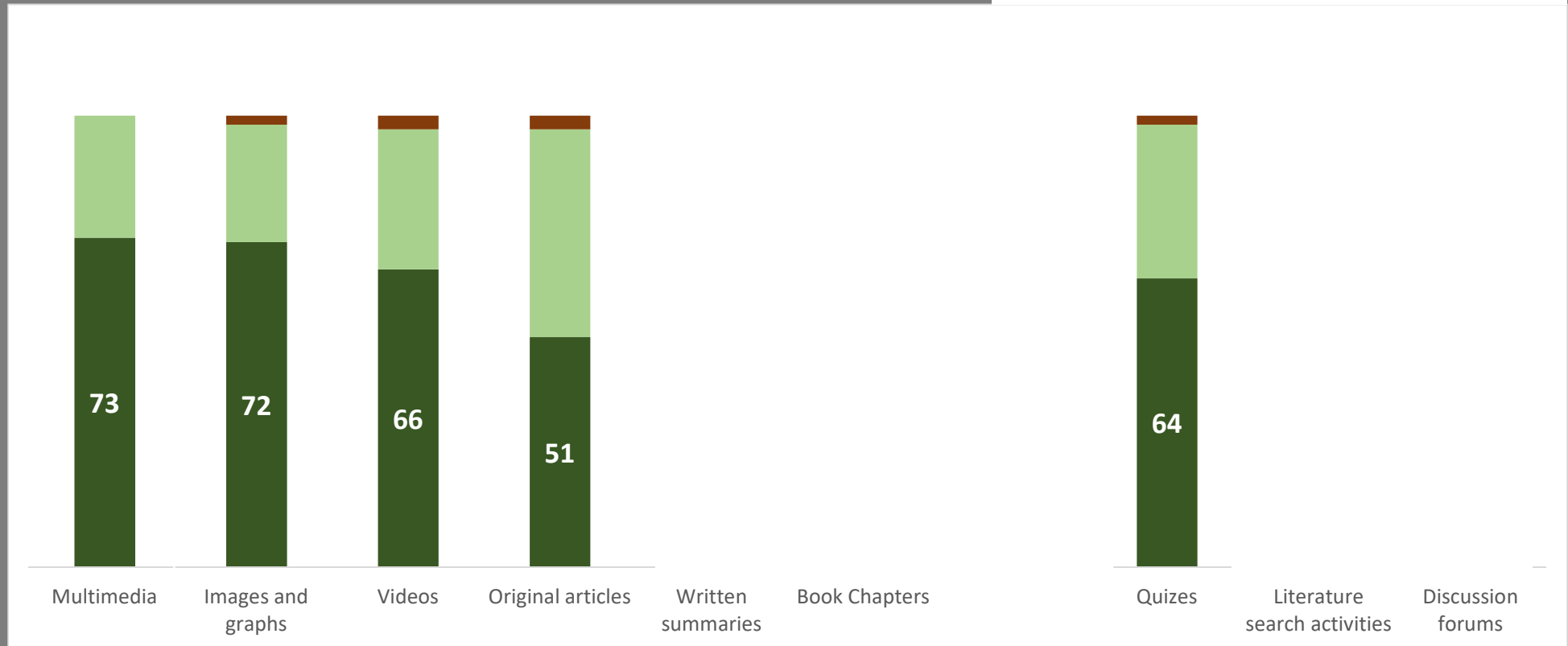
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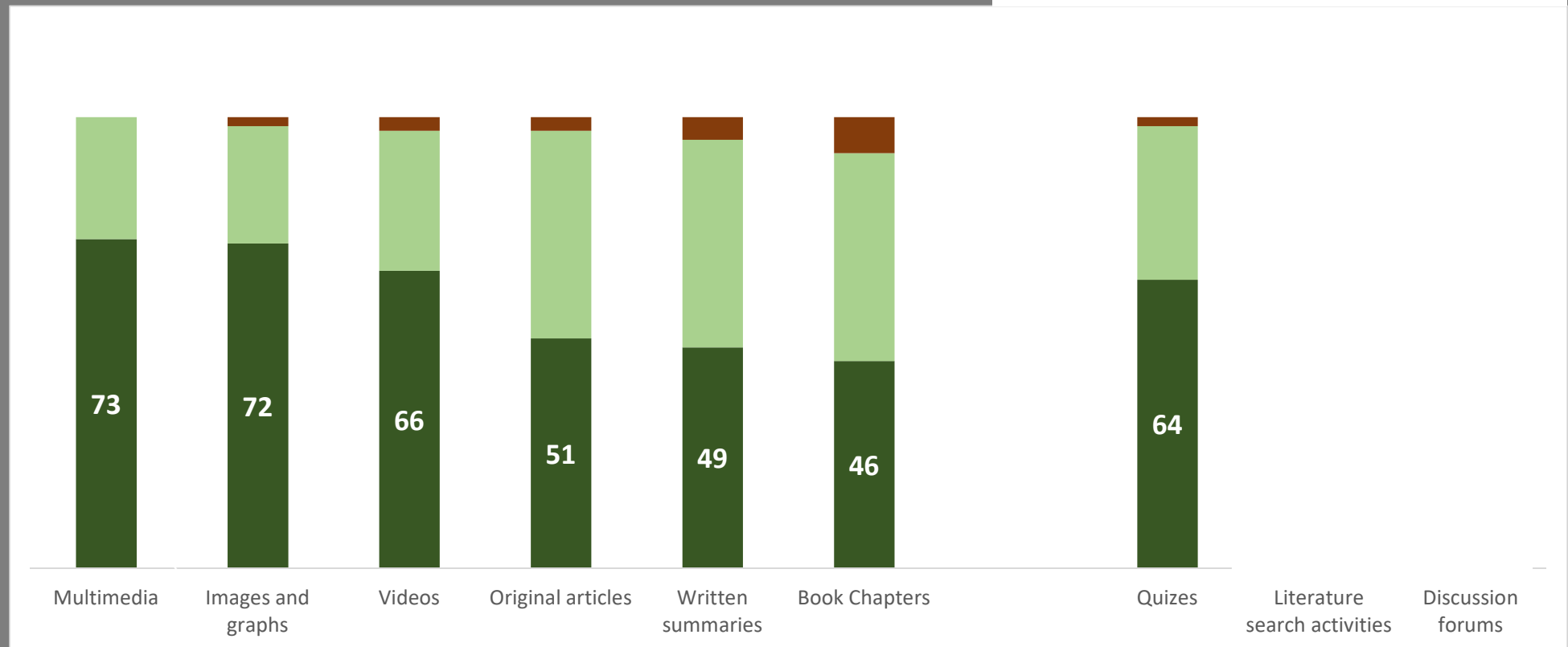
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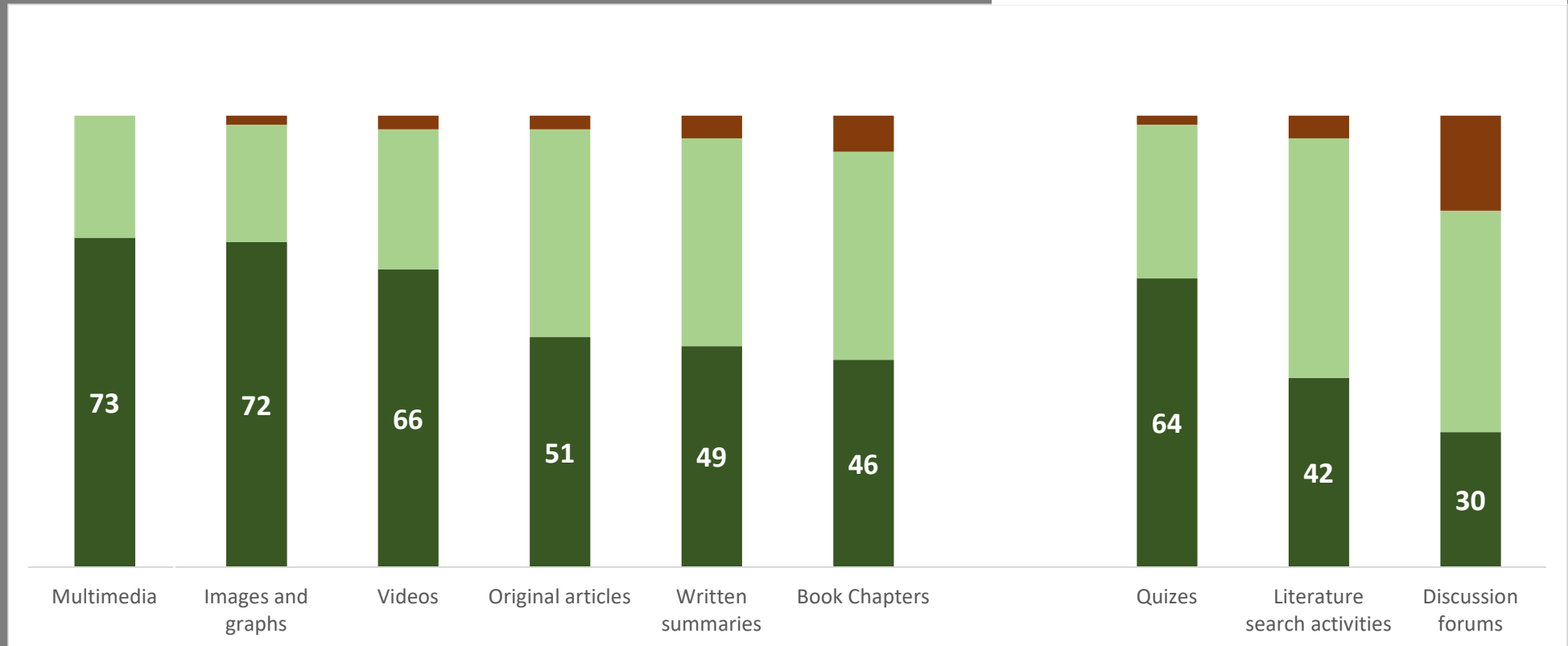
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Significance to Allied Health

- Diverse learning preferences
- Multifaceted multimedia interventions needed to optimise knowledge translation
- Prioritise visual resources (infographics and video)
- Active learning strategies including quizzes should be provided to optimise user engagement.



How can WE ALL improve knowledge translation?

Research completion

- Develop question and design
- Complete or re-
- Analyse

• Address concerns

- Finalise paper and sign over copyright

350 year old



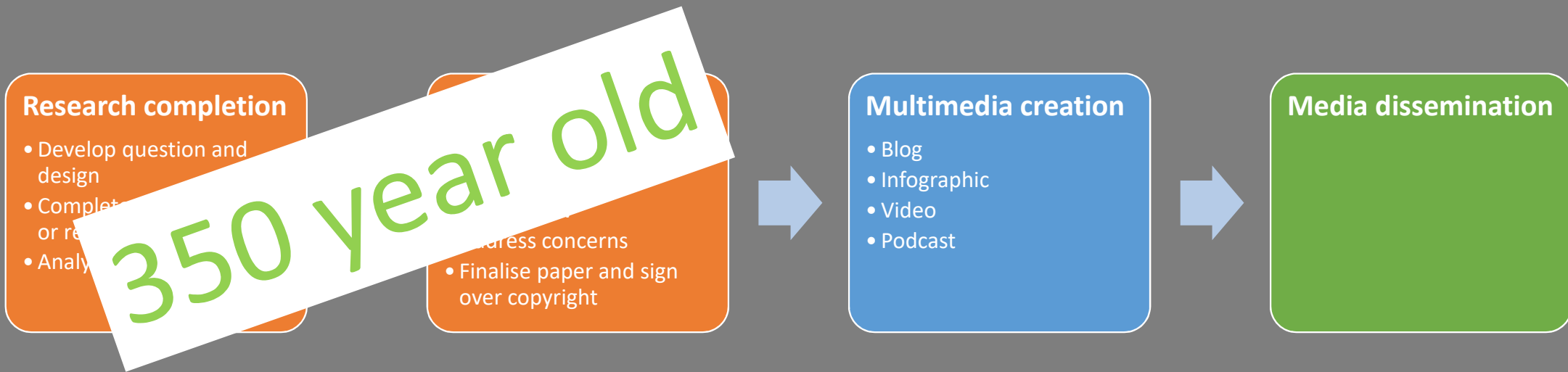
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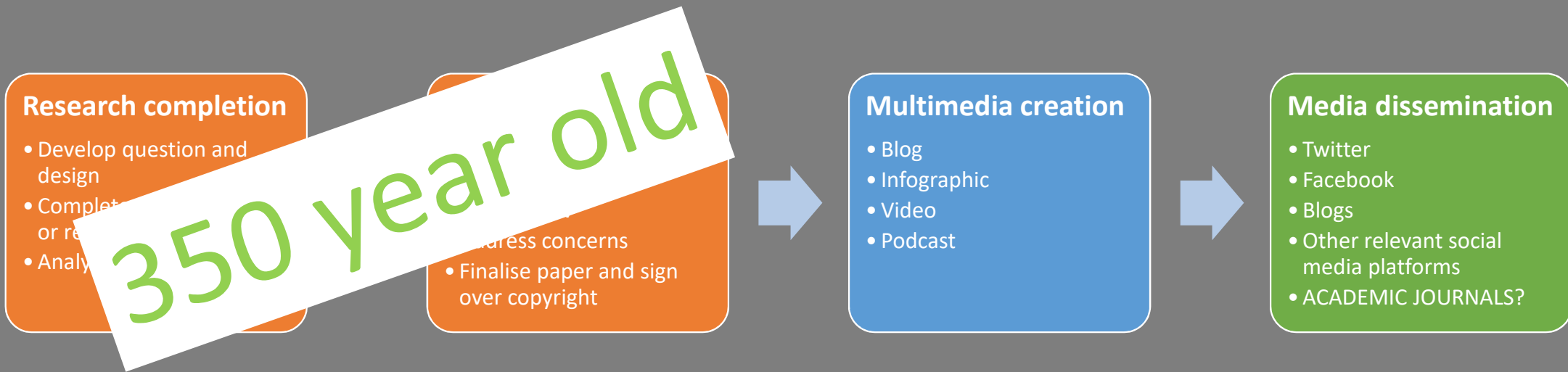
How can WE ALL improve knowledge translation?



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How can WE ALL improve knowledge translation?

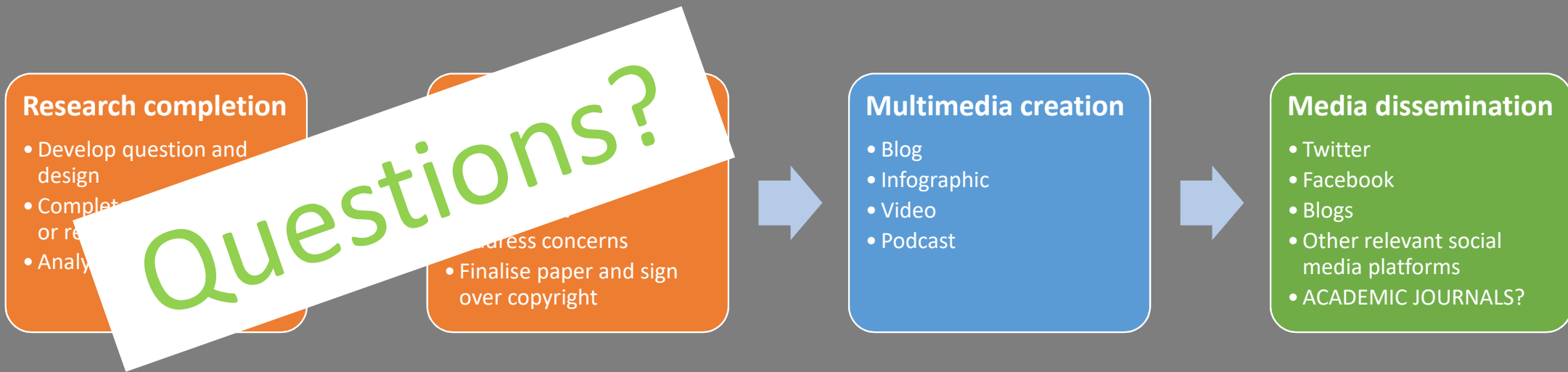


But

KNOWLEDGE TRANSLATION ≠ IMPLEMENTATION



How can WE ALL improve knowledge translation?



But

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