Appendix B: Pre-test Questionnaire

How is your psychological experience in the process of knowledge learning and creation?

Respected experts:

Hello! Thank you very much for taking the time to fill out this questionnaire amid your busy schedule. With technological advancements and changes in societal demands, the objects of scientific research are becoming increasingly complex, and scientific research is evolving towards multidisciplinary intersections. In the process of scientific research and knowledge creation, we need to frequently pay attention to cutting-edge knowledge in the research field and supplement the various knowledge needed for our own research. However, faced with profound professional knowledge and a vast knowledge system, we often feel at a loss, leading to a series of negative emotions or behaviors such as anxiety, frustration, confusion, or avoidance.

This survey aims to understand and evaluate whether you experience anxiety due to knowledge in various processes of scientific research, such as knowledge acquisition, internalization, and production. Please choose the option that best fits your actual situation after each question. The questionnaire is anonymous, and all data is for academic research use only. Your answers will be kept strictly confidential, and there are no right or wrong answers, nor does it involve ethical issues. Please fill it out objectively based on your own situation.

Thank you very much for your support and cooperation!

**Part 1: Basic Information**

1. Your gender is:
	* ○ Male
	* ○ Female
2. Your age is:
	* ○ 18-25 years
	* ○ 26-35 years
	* ○ 36-45 years
	* ○ 45-55 years
	* ○ 55 years and above
3. Your highest education level is:
	* ○ Junior college and below
	* ○ Bachelor's degree
	* ○ Master's degree
	* ○ Doctorate and above
4. The time you have been engaged in scientific research is:
	* ○ 1-5 years
	* ○ 6-10 years
	* ○ 11-15 years
	* ○ 16-20 years
	* ○ 20 years and above
5. Your discipline category is:
	* ○ Social science
	* ○ Humanities
	* ○ Natural science
	* ○ Engineering
	* ○ Medical science
	* ○ Other
6. Your attitude towards scientific research is:
	* ○ Extremely passionate
	* ○ Quite passionate
	* ○ Neutral
	* ○ Not very passionate
	* ○ Extremely dislike

 **Part 2: Test Items**

**Section 1: Behavioral Tendencies**

1. I often save, collect, or screenshot various knowledge content that I find useful.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
2. When I discover extensive knowledge behind a certain field, I have an impulse to learn immediately.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
3. I often feel that my knowledge structure is not comprehensive and balanced, causing anxiety about the gap between myself and others.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
4. I frequently don't know where to find knowledge related to my research.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
5. Sometimes I don't know how to transform the research content I envision into a paper.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
6. The rapid forgetting of the knowledge I have learned makes me feel annoyed.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent

**Section 2: Intrinsic Emotions** 7. I sometimes feel lost because the knowledge I have learned cannot be "monetized."

* ○ Completely Inconsistent
* ○ Inconsistent
* ○ Uncertain
* ○ Consistent
* ○ Very Consistent
1. I often encounter professional terms or complex concepts that are difficult to understand in my studies.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
2. I often worry that my knowledge may not keep up with the latest developments in the research field.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
3. Sometimes I doubt the practical significance of the experiments I conduct and the papers I publish.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
4. I often worry that my knowledge achievements may not be recognized, questioned, or criticized by others.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
5. I often worry that the literature I find is not comprehensive enough and may miss some important knowledge.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent

**Section 3: Structural Abilities** 13. I sometimes feel nervous because I cannot clearly identify my knowledge needs. - ○ Completely Inconsistent - ○ Inconsistent - ○ Uncertain - ○ Consistent - ○ Very Consistent

1. I can clearly distinguish the differences between knowledge in different domains.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
2. I can flexibly use existing knowledge to propose original theoretical viewpoints.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
3. I can discern and filter high-quality knowledge from the vast sea of knowledge.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
4. I can adjust the knowledge content of my learning flexibly to adapt to future research topics.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent

**Section 4: Cognitive Context** 18. I enhance my knowledge reserves by participating in paid courses, workshops, training camps, etc. - ○ Completely Inconsistent - ○ Inconsistent - ○ Uncertain - ○ Consistent - ○ Very Consistent

1. I can flexibly use various channels to obtain the knowledge I need.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
2. I often feel lonely on the road of scientific research.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
3. Sometimes I feel frustrated due to the high cost of knowledge consultation.
	* ○ Completely Inconsistent
	* ○ Inconsistent
	* ○ Uncertain
	* ○ Consistent
	* ○ Very Consistent
4. Knowledge-paid courses pushed by platforms like WeChat and academic new media make me feel nervous and uneasy.

Note: Items marked with an asterisk (\*) are reverse-coded.