



Awareness and Understanding of Intellectual Property Rights (IPR) Among Research Scholars: A Study at Kuvempu University

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ABSTRACT

In today's knowledge driven economy, Intellectual Property Rights (IPR) are critical to safeguarding innovations and ensuring academic integrity. This study examines research scholars' awareness, understanding, and practices regarding IPR at Kuvempu University. Utilizing a descriptive survey design, data were collected from 135 research scholars across various disciplines using a structured questionnaire. The findings reveal a significant "awareness competence disparity": while nominal awareness of IPR is exceptionally high (98.5%), deep conceptual mastery remains limited, with only 17.78% of scholars reporting substantive proficiency. A two-tier knowledge structure emerged; scholars demonstrated high awareness of academic ethics (Copyright: 74.8%, Plagiarism: 72.5%) but alarmingly low awareness of commercial and legal nuances (Fair Use: 24.4%, Trade Secrets: 26.6%). Furthermore, while university courses (35.5%) and online platforms (20%) are the primary sources of IPR knowledge, faculty mentorship (2.2%) and peer learning (1.4%) play a negligible role. Although 71.2% of scholars utilize plagiarism detection tools, nearly a third do not, indicating gaps in institutional consistency. The study concludes that while foundational IPR recognition is established, there is an urgent need for targeted interventions focusing on applied IP landscape analysis, commercialization, and legal exceptions. Recommendations include integrating advanced IPR modules into research curricula, training faculty to mentor scholars on IP commercialization, and enhancing library led workshops to bridge the gap between basic awareness and applied proficiency.

Keywords: Intellectual Property Rights (IPR), Research Scholars, Plagiarism, Copyright, Patents, Awareness, Higher Education, Kuvempu University

Received: 11 May 2026, Revised 3 July 2026, Accepted 12 July 2026

Copyright: DLINE

Geographical Confinement: As the study focuses exclusively on one university in Karnataka, India, the results may not reflect the IPR awareness landscape in other regions or countries with distinct legal frameworks and educational systems.

Self Reported Data: The data collected relies entirely on self reported responses through a structured questionnaire. This methodology introduces the potential for social desirability bias, where respondents may overestimate their actual awareness or understanding of complex IPR concepts [9]. Additionally, self reported proficiency may not accurately reflect applied competence in real world IPR scenarios.

Cross Sectional Nature: The descriptive survey design captures data at a single point in time, limiting the study's ability to track changes in IPR awareness over time or establish causal relationships between institutional interventions and improved IPR literacy.

Exclusion of Behavioral Metrics: The study measures perceived awareness and self reported familiarity rather than objective behavioral outcomes such as actual patent filings, copyright registrations, or verified instances of plagiarism.

Despite these limitations, the study provides a foundational understanding of the IPR awareness landscape at Kuvempu University and offers actionable insights for institutional policy development and future research directions.

2. Review of Literature

2.1 Historical Evolution and Global Perspectives on IPR

The evolution of Intellectual Property Rights (IPR) is closely tied to advances in human creativity and innovation. Historically, the concept of intellectual property emerged to protect creators' works and incentivize innovation, evolving through centuries from basic legal protections for inventions and literary works to comprehensive global treaties and conventions [2]. The establishment of the World Intellectual Property Organization (WIPO) in 1967 marked a significant milestone, promoting international cooperation in the protection of intellectual property and harmonizing laws across nations [1].

Globally, recognising IPR as a driver of economic growth and innovation has led to the development of comprehensive legal frameworks and policies. These frameworks ensure that creators receive economic rewards and recognition while encouraging further advancements in science, technology, and the arts [10]. However, as globalization and digitization expand, IPR systems face challenges such as piracy, counterfeiting, and cross border infringement, which require continuous adaptation and robust enforcement mechanisms. Despite these challenges, the fundamental purpose of IPR to encourage innovation while balancing public access remains central to global knowledge economies [11].

2.2 Awareness Levels of IPR Among Students and Researchers

Awareness of IPR among students and researchers is critical to fostering ethical research practices, protecting intellectual creations, and promoting innovation. Several studies have shown that knowledge levels within academic communities remain uneven, with significant gaps in understanding key components of IPR such as patents, copyrights, trademarks, and geographical indications [12]. For instance, Ong et al. [13] found that while students recognized common forms of infringement like unauthorized downloading, many lacked in-depth understanding of IPR frameworks. Similarly, Cheema et al. [4] reported that research scholars often have only partial awareness of plagiarism, underscoring the need for enhanced education on ethical writing and citation practices.

Studies conducted in India also reveal low to moderate awareness levels. For example, Shrivastava [14] observed that while students were generally aware of copyrights, their knowledge of patents, trademarks, and industrial designs was limited. Furthermore, Bordoloi [15] reported that only 18% of surveyed students correctly understood IPR concepts, highlighting the urgent need for educational interventions. These findings collectively indicate that while basic awareness exists, deeper conceptual knowledge remains inadequate among students and researchers.

2.3 Role of Institutions and Libraries in Promoting IPR Literacy

Academic institutions and libraries play a pivotal role in disseminating IPR knowledge and shaping students' understanding of legal and ethical research practices. Libraries act as crucial intermediaries between creators and users, providing access to information while ensuring compliance with copyright laws [7]. As information access evolves in the digital age, libraries are increasingly involved in managing copyright compliance and guiding users on proper use [16].

Institutional initiatives such as IPR cells, workshops, curriculum integration, and training programs have been shown to improve awareness and understanding. Igudia and Abioye [17] emphasized the essential role of university libraries in educating students about proper citation, paraphrasing, and quoting to avoid plagiarism. Similarly, Kumar [7] argued that libraries can significantly build IPR awareness by offering structured training and user education sessions. Badigannavar and Tadasad [18] highlighted the importance of forming institutional IPR policies to guide users and enhance compliance. These findings underscore the critical role that institutional support structures play in building a culture of respect for intellectual property and fostering innovation within academic environments.

2.4 Issues and Challenges: Plagiarism, Copyright Infringement, and Digital Content Misuse

Plagiarism and copyright infringement continue to pose significant challenges in academia. Widespread access to online content has exacerbated the problem, with students often engaging in unethical practices such as copying from peers, unauthorized downloading, and uncredited use of digital materials [13] (Ong et al., 2012). Gorman [19] observed that the proliferation of digital resources has led to more frequent plagiarism among students, often due to ignorance or lack of awareness. Similarly, Aboyade et al. [5] documented the widespread unauthorized photocopying of academic materials in Nigerian universities, highlighting the misuse of copyrighted content.

The complexity of copyright laws and the evolving nature of digital content also challenge researchers and institutions. Di Valentino [20] found that many faculty members struggled to fully understand and comply with institutional copyright policies. Additionally, Mohamad et al. [21] highlighted postgraduate students' misuse of copyrighted images, underscoring the need for better education on copyright compliance. The misuse of digital content extends beyond plagiarism, encompassing issues like digital piracy and unauthorized distribution, which can have legal and ethical implications [22]. Addressing these challenges requires a multifaceted approach, including improved legal literacy, stronger institutional policies, and continuous user education.

2.5 Previous Empirical Studies on IPR Awareness and Educational Interventions

A wide range of empirical studies have examined IPR awareness and the effectiveness of educational interventions. Kumar and Mohindra [23] assessed doctoral students' understanding of plagiarism and found that limited access to detection tools and lack of awareness of penalties contributed to unethical practices. Jenina and Tongol [8] explored faculty perceptions of IPR, revealing significant variations across age groups and disciplines, with younger faculty members emphasizing ownership and protection.

Numerous studies have recommended educational interventions such as workshops, seminars, and curriculum integration. Shrivastava [14] advocated for the inclusion of IPR topics in syllabi and the organization of regular training programs. Early education on IPR could enhance awareness and encourage innovation among dental researchers. Likewise, Deshpande et al. [24] highlighted the importance of structured knowledge to prevent infringement and foster sustainable growth in the healthcare sector. Ravi and Janodia [25] noted that low awareness among Indian academics hindered IP commercialization and career development, suggesting that policy support and institutional collaboration are crucial. Collectively, these empirical findings underscore the need for comprehensive and continuous educational efforts to enhance IPR literacy among students, researchers, and faculty. [26].

2.6 Final Remarks on Early Studies

The reviewed literature demonstrates that while the significance of IPR in fostering innovation,

protecting creativity, and promoting ethical practices is widely recognized, awareness and understanding remain inconsistent across academic settings. Key challenges include limited knowledge of complex IPR components, widespread plagiarism and misuse of digital content, and insufficient institutional initiatives. Strengthening IPR literacy requires structured training, curriculum integration, proactive library services, and continuous institutional support. These measures are essential to safeguard intellectual creations, foster a culture of innovation, and align academic practices with global standards.

3. Research Methodology

3.1 Research Design – Descriptive Survey Method

The present study adopts a descriptive survey research design, which is well suited to assessing awareness, understanding, and practices related to Intellectual Property Rights (IPR) among research scholars. A descriptive survey aims to collect accurate, and systematic information about the characteristics, opinions, attitudes, or behaviours of a defined population [17]. It allows researchers to describe existing conditions, identify gaps, and explore relationships among variables without manipulating the environment [4]. This approach was chosen as it facilitates the collection of comprehensive data from a large number of respondents and provides valuable insights into their awareness, familiarity, and perceptions of IPR related issues within the academic context. The descriptive survey design also enables the presentation of results in a statistically meaningful manner, which is essential for drawing reliable conclusions and making evidence based recommendations [4].

3.2 Data Collection Tool – Structured Questionnaire

This study designed and used a structured questionnaire as the primary data collection tool. The questionnaire was developed based on a thorough review of existing literature and similar studies on IPR awareness [7] [11]. It included both closed ended and open ended questions, allowing respondents to provide quantitative responses and qualitative insights. The questions were organized into sections covering demographic information, awareness levels, familiarity with IPR components, sources of knowledge, usage of plagiarism detection tools, and training needs.

The questionnaire's structured format ensured consistent, comparable responses across participants. Furthermore, the tool was pre tested on a small group of respondents to ensure clarity, reliability, and validity before full-scale administration [3].

3.3 Data Collection Process

The data collection process involved administering the questionnaire to research scholars by distributing printed copies in person. Before participating, respondents were informed about the study's purpose, and their consent was obtained. They were assured that their responses would remain confidential and be used solely for research purposes

3.4 Data Analysis – Percentage, Frequency, and Descriptive Statistics

The collected data were systematically organized, coded, and analysed using descriptive statistical techniques. Tools such as percentages, frequencies, and averages were used to interpret the data and present it clearly and logically. The analysis focused on key areas such as demographic characteristics, awareness levels, familiarity with IPR components, use of plagiarism detection tools, and the role of institutional mechanisms in promoting IPR literacy. The results were presented in tables and charts, followed by interpretive discussions to contextualize the findings and link them to existing literature.

3.5 Analysis and Interpretation of Data

In the following discussions, we present the results of our analyses and interpret the empirical data.

Category	Sub-category	Frequency	Percentage	Explanation
Age	Below 25	10	7.4%	Majority (74.1%) are aged 25–30, the most active research phase.
Age	25–30	100	74.1%	Reflects active research engagement age.
Age	31–35	18	13.3%	Moderate representation.
Age	Above 36	7	5.2%	Small segment, possibly advanced researchers.
Gender	Male	69	51.1%	Gender distribution is nearly balanced.
Gender	Female	66	48.9%	Indicates equal participation.
Academic Year	1st Year	31	22.9%	Diverse representation across years.
Academic Year	2nd Year	45	33.3%	Majority are in 2nd year.
Academic Year	3rd Year	34	25.1%	Significant participation.
Academic Year	4th Year and above	25	18.5%	Senior researchers included.

Table 1. Demographic Information of Respondents

The demographic profile in Table 1 outlines the overall composition of the surveyed cohort at Kuvempu University by age, gender, and academic progression. The data show that the vast majority of research scholars (74.1%, $n = 74.1$) fall into the 25–30 age group, which corresponds to the peak period of active doctoral research. Mid-career scholars aged 31–35 represent 13.18% ($n = 18$), while scholars below 25 years and those above 36 years account for 7.4% ($n = 10$) and 5.2% ($n = 7$), respectively. The gender distribution shows near parity, with 51.1% male ($n = 69$) and 48.9% female ($n = 66$) respondents, confirming equitable institutional representation. In terms of academic stage, scholars in their second year represent the largest

single proportion (33.3%, $n=45$), followed by third-year scholars (25.1%, $n=34$), first-year researchers (22.9%, $n=31$), and advanced candidates in their fourth year or beyond (18.5%, $n=25$). This distribution across multiple doctoral milestones ensures the collected data captures perspectives from both early coursework and late-stage dissertation phases.

Indicator	Response	Frequency	Percentage	Explanation
Awareness of IPR	Yes	133	98.5%	Nearly all scholars are aware of IPR.
Awareness of IPR	No	2	1.4%	Very few are unaware.
Familiarity	Very Familiar	24	17.78%	A small group has strong knowledge.
Familiarity	Familiar	72	53.33%	Majority have a general understanding.
Familiarity	Somewhat Familiar	32	23.7%	Many know basics but lack depth.
Familiarity	Not Familiar	7	5.18%	Few have minimal or no familiarity.

Table 2. Awareness and Familiarity with IPR

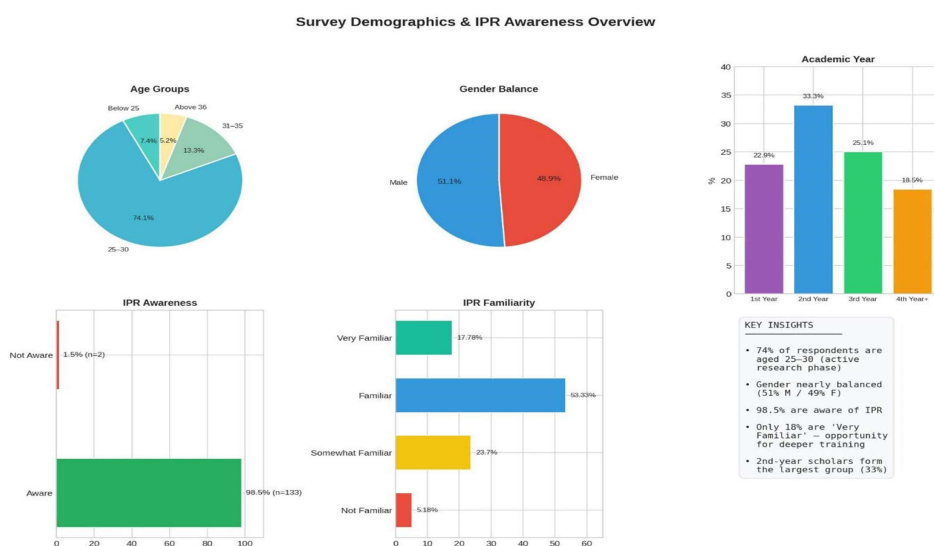


Figure 1. Survey Demographics and IPR Overview

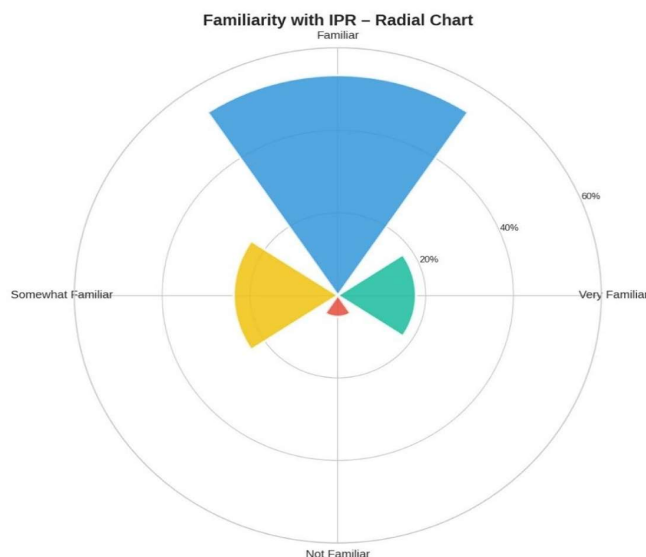


Figure 2. Familiarity with IPR

Awareness and Familiarity with IPR

Table 2 highlights baseline awareness and self assessed familiarity with Intellectual Property Rights (IPR) among participants. Nominal awareness is exceptionally high, with 98% ($n = 133$) of respondents confirming awareness of IPR, whereas only 1.4% ($n = 2$) report being unaware. However, a closer examination of comprehension depth reveals an awareness competence disparity. While a majority of 53.33% ($n = 72$) categorize themselves as “Familiar” with IPR concepts, only 17.78% ($n = 24$) report being “Very Familiar” and possessing strong conceptual mastery. In contrast, nearly 29% of the cohort exhibits limited understanding, with 23 (= 32) indicating they are merely “Somewhat Familiar” and 5.18% ($n = 7$) stating they are “Not Familiar”. These findings suggest that while general exposure to the term is widespread across the university, comprehensive operational mastery of intellectual property remains limited to a relatively small segment of researchers.

3.6 Age-wise Distribution of Respondents

Age Group	Frequency (Approx.)	Percentage	Interpretation
Below 25	10	7.4%	Represents younger scholars entering research.
25–30	100	74.1%	Majority are in their active research phase.
31–35	18	13.3%	Mid-career researchers with moderate participation.

Above 36	7	5.2%	Represents senior scholars with advanced research experience.
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Table 3. Age-wise Distribution of Respondents

Table 3 isolates the age distribution of the research scholars to provide granular insight into the sample's generational dynamics. The data confirms a heavy concentration in early adulthood, with 74.1% ($n=100$) of respondents in the 25–30 age band. Mid-career researchers aged 31–35 constitute the second largest subgroup at 13.3% ($n=18$). Early career scholars aged below 25 account for 7.4% ($n=10$), while senior researchers aged 36 and above represent the smallest share at 5.2% ($n=7$). Cumulatively, over 81% of the scholars are under the age of 30. This shows that the respondent base primarily comprises young investigators in critical phases of scientific writing, highlighting the strategic importance of early-career training in ethical publishing, copyright laws, and patent filing procedures.

3.7 Gender-wise Distribution of Respondents

Gender	Frequency (Approx.)	Percentage	Interpretation
Male	69	51.1%	Slightly more male respondents participated in the study.
Female	66	48.9%	Female respondents are almost equally represented.

Table 4. Gender-wise Distribution of Respondents

Table 4 focuses specifically on the gender breakdown of the participating researchers. of the total 135 scholars surveyed, male respondents constitute 51.1% ($n = 69$), while female respondents account for 48.9% ($n=66$). This balanced distribution indicates no gender based sampling bias and confirms that male and female scholars participate equally in doctoral research programs at Kuvempu University. Consequently, both groups face identical exposure to institutional academic environments, indicating that institutional IPR initiatives and curriculum enhancements will serve male and female researchers in equal measure.

3.8 Awareness of IPR among Respondents

Awareness Level	Frequency (Approx.)	Percentage	Interpretation
Aware	133	98.6%	Almost all respondents are aware of Intellectual Property Rights.

Not Aware	2	1.4%	A very small fraction is not aware of IPR concepts.
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Table 5. Awareness of IPR among Respondents

Table 5 presents the isolated metric of binary IPR awareness across the surveyed scholars. The results indicate that an overwhelming majority of 98.6% ($n=133$) of researchers are aware of Intellectual Property Rights, while an isolated 1.4% ($n=2$) report having no awareness. This high recognition rate reflects the success of digital academic communication, research mandates, and general university coursework in establishing foundational familiarity with IPR. Nevertheless, when analyzed alongside the granular domain specific data from subsequent sections of the study, this universal nominal awareness demonstrates that baseline recognition alone does not ensure adequate proficiency in managing complex legal aspects such as licensing, fair use exceptions, and trade secret protection.

3.9 Statistical Validation of the results in the above tables

Table	Variable	Chi-square	df	p-value	Cramer V
1	Age	175.31	3	< .001	0.658
1	Gender	0.07	1	.796	0.022
1	Academic year	6.24	3	.100	0.124
2	IPR awareness	127.12	1	< .001	0.970
2	IPR familiarity	67.46	3	< .001	0.408
3	Age group	175.31	3	< .001	0.658
4	Gender	0.07	1	.796	0.022
5	Awareness level	127.12	1	< .001	0.970

- Age distribution was significantly uneven, $\chi^2(3) = 175.31$, $p < .001$, $V = 0.658$. Respondents aged 25–30 were strongly overrepresented.
- Gender distribution was not significantly different from an equal split, $\chi^2(1) = 0.07$, $p = .796$, $V = 0.022$.
- Academic-year distribution was not statistically significant, $\chi^2(3) = 6.24$, $p = .100$, $V = 0.124$.
- IPR awareness was overwhelmingly concentrated in the “aware” category, $\chi^2(1) = 127.12$, $p < .001$, $V = 0.970$.
- IPR familiarity differed significantly across categories, $\chi^2(3) = 67.46$, $p < .001$, $V = 0.408$. “Familiar” was the most common response.

- Tables 3–5 repeat information from Tables 1–2, so their inferential results are identical.

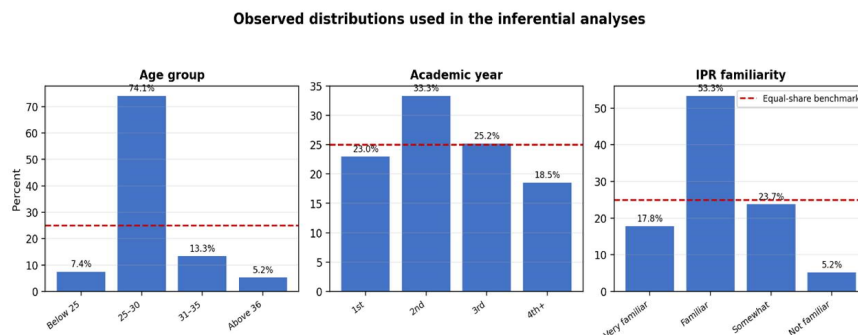


Figure 3. Distributions of the Inferential Analyses

3.10 Proficient in IP landscape

Proficiency Level	Frequency	Percentage	Interpretation
Substantive Proficiency	24	17.78%	A small group has strong conceptual knowledge of IPR.
Well Grounded	72	53.33%	The majority have a general understanding of IPR concepts.
Medium Proficiency	32	23.70%	Many scholars know the basics but lack deeper understanding.
Not Proficient	7	5.18%	A very small group lacks familiarity with IPR concepts.

Table 6. Proficient in IP Landscape Analysis

Table 6 captures the self assessed proficiency levels of research scholars in conducting IP landscape analysis. The data is organized into four ordinal categories ranging from “Substantive Proficiency” (deep, actionable knowledge) to “Not Proficient” (minimal or no familiarity). The table mirrors the familiarity distribution from Table 2 but frames it specifically around the *applied skill* of analyzing IP landscapes meaning the ability to assess competitive patent filings, identify white spaces, and evaluate freedom to operate.

The table reveals a steep drop off from general awareness to applied proficiency. While 98.5% of scholars are nominally “aware” of IPR (Table 5), only 17.78% claim substantive proficiency in IP landscape analysis. The largest segment (53.33%) falls into the middle “Well Grounded” category, indicating they possess a functional but not deep understanding.

Critically, nearly 29% of scholars (23.70% + 5.18%) rate themselves as having only medium or no proficiency. This is a significant finding because IP landscape analysis is a *practical* skill required for patent filing, competitive intelligence, and research commercialization. The gap between high awareness and low applied proficiency

suggests that while scholars recognize IPR's importance, they lack the training to translate that awareness into actionable analytical skills. This aligns with the study's broader conclusion that curriculum and hands on workshops are urgently needed.

3.11 Focused Knowledge of IPR Topics

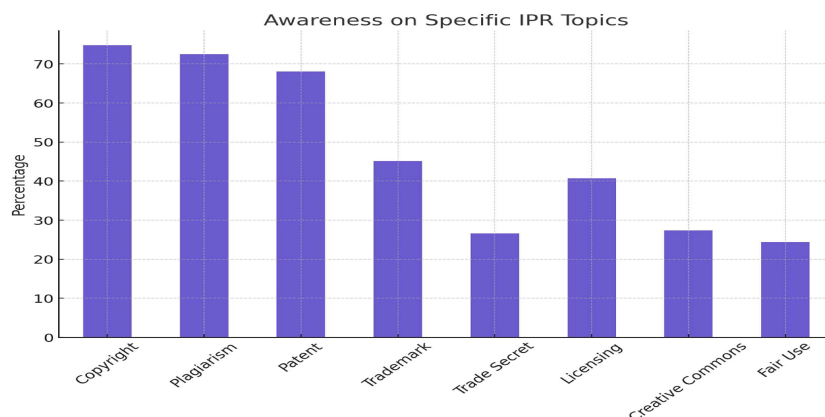


Figure 2. Awareness of Specific IPR Topics

IPR Topic	Aware Respondents (Approx.)	Percentage	Interpretation
Copyright	101	74.8%	Most respondents are aware because it is directly relevant to academic writing.
Plagiarism	98	72.5%	High awareness reflects the emphasis on research ethics.
Patent	92	68.1%	A majority recognize the importance of patents in innovation.
Trademark	61	45.1%	Moderate awareness, indicating a need for more education.
Licensing	55	40.7%	Moderate understanding but requires improvement.
Creative Commons	37	27.4%	Low awareness indicates a gap in open access knowledge.
Trade Secret	36	26.6%	Low awareness suggests limited exposure to commercial aspects.
Fair Use	33	24.4%	Very low understanding, showing a major knowledge gap.

Table 7. Understanding of Specific IPR Topics

Table 7 presents a topic-wise breakdown of awareness across eight distinct IPR components. The topics are arranged in descending order of awareness, from Copyright (highest) to Fair Use (lowest). The data reflect respondents' self-reported familiarity with each legal concept.

This table provides the most diagnostic insight of the entire study. It clearly shows a two tier knowledge structure:

- Tier 1 (High Awareness > 65%): Copyright (74.8%), Plagiarism (72.5%), and Patents (68.1%). These are topics directly tied to academic publishing, thesis writing, and research ethics areas where scholars receive formal or informal training through coursework, journal guidelines, and university policies.
- Tier 2 (Low Awareness < 45%): Trademarks (45.1%), Licensing (40.7%), Creative Commons (27.4%), Trade Secrets (26.6%), and Fair Use (24.4%). These are topics related to *commercialization, technology transfer, and legal exceptions* areas that are rarely covered in standard research curricula.

The alarmingly low awareness of Fair Use (24.4%) is particularly concerning. Fair use is a critical legal defense that allows scholars to quote, reproduce, and build upon copyrighted works without permission under certain conditions. Lack of understanding here could lead to either overly cautious self censorship (avoiding legitimate uses) or inadvertent infringement (assuming all educational use is "fair"). Similarly, low awareness of Creative Commons (27.4%) suggests that scholars may not know how to legally share their own work through open-access repositories a missed opportunity for research dissemination. This table strongly supports the study's recommendation for targeted training on commercial and legal IPR topics, not just academic ethics.

3.12 Sources of IPR Awareness

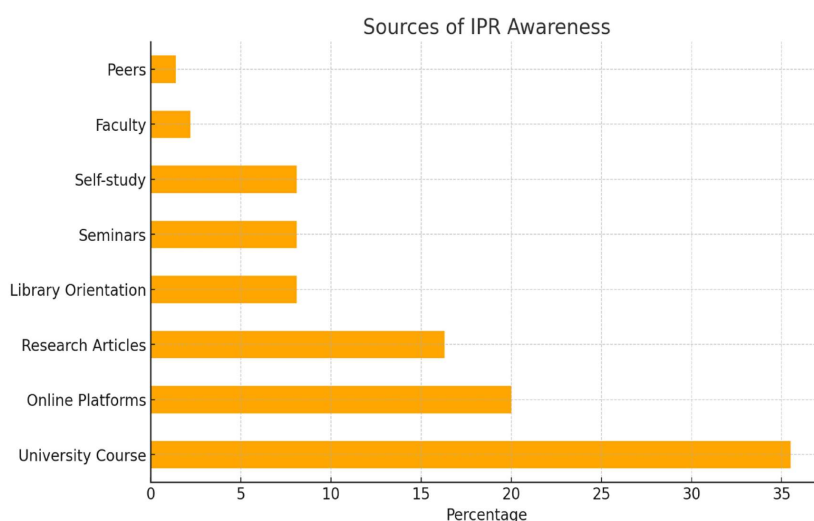


Figure 5. Sources of IPR Awareness

Source	Respondents (Approx.)	Percentage	Interpretation
University Course	48	35.5%	Primary source of IPR awareness among research scholars

Online Platforms	27	20.0%	Digital learning platforms play a key role in spreading awareness
Research Articles	22	16.3%	Moderate contribution through scholarly publications
Library Orientation	11	8.1%	Limited exposure through library led programs.
Seminars	11	8.1%	Occasional seminars contribute but have limited reach.
Self-study	11	8.1%	Personal effort plays a small but notable role.
Faculty	3	2.2%	Minimal involvement of faculty in disseminating IPR knowledge

Table 8. Sources of IPR Awareness

4. Description

Table 8 identifies the channels through which research scholars acquire IPR knowledge. Respondents could select their primary source(s) of awareness from a list of eight options, ranging from formal instruction (University Courses) to informal interpersonal channels (Peers). The percentages indicate the proportion of scholars who identified each source as significant.

This table reveals a highly centralized knowledge dissemination model with three dominant channels and several underutilized ones:

- **Dominant Sources** (35.5% + 20% + 16.3% = 71.8%): University Courses, Online Platforms, and Research Articles collectively account for nearly three quarters of all IPR awareness. This indicates that formal and semi formal educational channels are the backbone of IPR literacy at Kuvempu University. The prominence of Online Platforms (20%) is notable it suggests that scholars are supplementing their formal education with YouTube tutorials, MOOCs, and free IPR resources, reflecting a self directed learning culture.
- **Underutilized Sources** (Faculty at 2.2%, Peers at 1.4%): The near negligible role of faculty and peers is a major red flag. Faculty members are expected to mentor scholars on ethical publishing, citation practices, and patent filing yet they contribute minimally to IPR awareness. This could be because faculty themselves lack IPR training, or because they assume scholars already know these concepts. Similarly, peer to peer learning is almost non existent, representing a lost opportunity for collaborative knowledge transfer.
- **Moderate but Improvable Sources** (Library at 8.1%, Seminars at 8.1%, Self-study at 8.1%): Libraries and seminars are not reaching their full potential. Given that libraries house IPR databases and legal texts, their 8.1% contribution suggests that scholars are either unaware of these resources or find them inaccessible. Seminars, while useful, appear to be occasional rather than systematic.

The key takeaway is that institutions should leverage the dominant channels (courses and online platforms) while simultaneously activating the underutilized ones (faculty mentorship and library services). For example, integrating IPR modules into existing research methodology courses could quickly boost awareness, while training faculty to incorporate IPR discussions into supervision meetings could close the mentorship gap.

4.1 Use of Plagiarism Detection Tools

Usage Category	Respondents (Approx.)	Percentage	Interpretation
Use Tools	96	71.2%	A majority of respondents use plagiarism detection tools, showing awareness of research ethics.
Do Not Use Tools	39	28.8%	A significant minority do not use such tools, indicating a gap in adoption of plagiarism check practices.

Table 9. Use of Plagiarism Detection Tools

Table 9 is a binary (yes/no) representation of whether research scholars use plagiarism detection software (e.g., Turnitin, iThenticate, or free alternatives). It measures the *adoption* of technological tools designed to ensure originality and academic integrity.

4.2 Interpretation

At face value, 71.1% usage is a positive indicator which shows that most scholars are actively taking steps to check their work for unintentional plagiarism before submission. This likely reflects institutional mandates (e.g., university policies requiring plagiarism checks for thesis submission) and growing awareness of the consequences of academic misconduct.

However, the 28.8% non-usage is a significant concern for three reasons:

1. **Institutional Inconsistency:** Nearly one-third of scholars are not using detection tools, suggesting that either the university does not mandate their use uniformly, or access to paid tools is restricted to certain departments, leaving others without resources.
2. **Risk of Unintentional Plagiarism:** Scholars who do not use these tools are more vulnerable to accidental plagiarism through poor paraphrasing, inadequate citation, or self plagiarism (reusing their own previously published work without attribution). This exposes them to reputational damage and potential disciplinary action.
3. **Digital Literacy Gap:** Non-usage may also reflect a lack of training on how to access or operate these tools, rather than a conscious choice. If scholars are unaware of free alternatives (e.g., Grammarly's plagiarism checker, Quetext) or do not know how to request institutional access, then the gap is a training issue, not a behavioral one.

When cross referenced with Table 7 (where 72.5% were aware of plagiarism as a concept), the 71.1% usage rate suggests that awareness largely translates into action, but the 28.8% non users represent a priority group for targeted interventions such as departmental workshops on tool access, centralized licensing, and integration of plagiarism checks into the submission workflow.

4.3 Importance of IPR Awareness

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4.4 Library Effectiveness in Creating IPR

Effectiveness Level	Respondents (Approx.)	Percentage	Interpretation
Very Effective	29	21.48%	Some respondents find the library very effective in promoting IPR awareness.
Effective	53	39.26%	Most respondents rate the library as effective in creating awareness.
Neutral	37	27.41%	A significant number are neutral, indicating potential for improvement.

Ineffective	10	7.41%	A small group finds the library ineffective.
Very Ineffective	6	4.44%	A few respondents consider the library very ineffective in this role.

Table 10. Library Effectiveness in Creating IPR Awareness

4.5 Training Needs in Various IPR Areas



Figure 6. Training Needs in Various IP Areas

IPR Area	Respondents (Approx.)	Percentage	Interpretation
Plagiarism	79	58.52%	Most respondents want training on plagiarism, highlighting its importance in research ethics.
Copyright	78	57.78%	Strong demand for training in copyright law and protection.
Patents	74	54.8%	A significant need for understanding patents and innovation protection.
Licensing	60	44.44%	Moderate demand indicates the need for commercial knowledge.

Trademarks	51	37.78%	Respondents require more training on trademark laws and applications.
Creative Commons	49	36.3%	Low awareness suggests a gap in open licensing knowledge.
Trade Secrets	48	35.56%	Important for commercialization but currently less understood.
Fair Use	47	34.81%	One of the least understood areas, highlighting the need for awareness.

Table 11. Training Needs in Various IPR Areas

4.6 Statistical Validation

Table 1 / 3 / 4 – Demographics

Variable	Mode / Key finding	Details
Age	25–30 years (74.1%, n=100)	Below 25: 7.4%; 31–35: 13.3%; Above 36: 5.2%. Strong concentration in the peak research active age band.
Gender	Nearly balanced	Male 51.1% (69), Female 48.9% (66).
Academic Year	2nd Year (33.3%, n=45)	1st: 22.9%; 3rd: 25.1%; 4th+: 18.5%. Good spread across stages.

Table 2 / 5 / 6 – Awareness & Familiarity

- Awareness of IPR: 98.5% (133/135) aware; only 2 respondents ($\approx 1.5\%$) unaware. 95% Wilson CI: 94.8% – 99.6%.
- Familiarity (ordinal scoring: Very Familiar = 4 ... Not Familiar = 1):
- Very Familiar 17.8% (24)
- Familiar 53.3% (72)
- Somewhat Familiar 23.7% (32)
- Not Familiar 5.2% (7)
- Mean score = 2.84, Median = 3.0, SD = 0.77, slight negative skew (-0.39).

Most scholars have a general understanding, but deep familiarity is limited.

5. Discussions

The findings provide critical insights into the IPR literacy landscape among research scholars at Kuvempu University, highlighting both significant achievements and pressing areas for improvement.

The Awareness-Competence Disparity: A primary finding of this study is the stark contrast between nominal awareness and applied proficiency. While an overwhelming 98.5% of scholars are aware of IPR, only 17.78% possess “substantive proficiency” in IP landscape analysis. This aligns with previous literature [4, 15], which suggests that mere exposure to IPR does not translate into the operational mastery required for patent filing, competitive intelligence, or technology transfer. The high concentration of scholars in the 25–30 age bracket (74.1%) underscores that this gap exists precisely during the most critical phase of their research careers, where early intervention could significantly impact their future innovation and commercialization trajectories.

Domain-Specific Knowledge Disparities: The data reveals a distinct “two-tier” knowledge structure. Scholars are highly aware of concepts directly tied to their immediate academic survival, such as Copyright (74.8%), Plagiarism (72.5%), and Patents (68.1%). However, awareness drops precipitously for topics related to legal exceptions and commercialization, such as Fair Use (24.4%), Trade Secrets (26.6%), and Creative Commons (27.4%). The low understanding of Fair Use is particularly concerning, as it may lead to either overly cautious self-censorship or inadvertent copyright infringement, consistent with concerns raised by Ahmadi et al. (2015). Similarly, limited knowledge of Creative Commons represents a missed opportunity for scholars to legally share their work through open access repositories, limiting the global reach and impact of their research [21].

Sources of Knowledge and the Mentorship Gap: The study identifies a highly centralized knowledge dissemination model reliant on University Courses (35.5%) and Online Platforms (20%). Strikingly, faculty members (2.2%) and peers (1.4%) contribute very little. In academic ecosystems, supervisors and faculty are expected to guide scholars on ethical publishing and patent filing (Jenina & Tongol, 2019). This minimal involvement suggests a systemic gap in faculty mentorship regarding IPR, potentially because faculty themselves lack updated training in IP commercialization or assume scholars acquire this knowledge independently (Ravi & Janodia, 2022). Activating faculty mentorship is therefore a critical, untapped resource for improving IPR literacy, as emphasized by Deshpande et al. [24].

Tool Adoption and Institutional Support: The adoption of plagiarism detection tools is relatively high (71.2%), reflecting the success of institutional mandates and research ethics training [23]. However, the 28.8% non-usage rate highlights institutional inconsistencies and potential digital literacy gaps. Furthermore, while over 60% of respondents view the university library as effective, a significant portion remains neutral or finds it ineffective. This indicates that while libraries are fulfilling a baseline role in copyright compliance [7], they must proactively expand their services to include hands on IP landscape analysis training and commercialization guidance to meet the scholars’ expressed training needs, as recommended by Badigannavar and Tadasad [18].

Implications for Policy and Practice: The findings underscore the urgent need for a multi-pronged approach to IPR education. First, integrating advanced IPR modules into research methodology courses could systematically address the knowledge gaps in Fair Use, Trade Secrets, and Creative Commons [14]. Second, training faculty to incorporate IPR discussions into supervision meetings could activate the underutilized mentorship channel [17]. Third, libraries should shift from passive information provision to active IPR education by offering workshops on patent searches, copyright compliance, and open access licensing [18]. Finally, institutional policies should mandate uniform access to plagiarism detection tools and provide centralized licensing to ensure all scholars can benefit from these resources [13].

Theoretical Contributions: This study contributes to the broader theoretical understanding of IPR literacy by empirically demonstrating the “awareness competence disparity” within an Indian university context. It extends Gnanasekaran and Balamurugan [11] by identifying specific domain based knowledge gaps and sources of information asymmetry. The findings also provide empirical support for the institutional theory perspective

that formal structures (courses, libraries) are more effective in disseminating IPR knowledge than informal mechanisms (peer learning, faculty mentorship), suggesting that deliberate policy interventions are necessary to activate the latter.

6. Conclusion

The study concludes that research scholars at Kuvempu University possess a strong foundational awareness of Intellectual Property Rights, particularly concerning academic ethics, plagiarism, and basic copyright. However, this baseline awareness is not sufficient to navigate the complexities of the modern knowledge economy. There is a critical deficit in applied proficiency, specifically regarding Fair Use, Trade Secrets, Licensing, and Creative Commons areas essential for research commercialization and open access dissemination.

The current reliance on formal coursework and self directed online learning, coupled with the near absence of faculty mentorship in IPR matters, limits the depth of scholars' understanding. To transition from a culture of mere "compliance" to one of "innovation and commercialization," the university must bridge the gap between awareness and application. This requires a paradigm shift in institutional support, emphasizing targeted, hands on training in IP landscape analysis, empowering faculty to act as IPR mentors, and leveraging library services to provide comprehensive guidance on both legal exceptions and technology transfer.

Limitations

While this study provides valuable insights into IPR awareness at Kuvempu University, several limitations must be acknowledged:

- 1. Geographical and Institutional Scope:** The study is confined to a single institution (Kuvempu University). Consequently, the findings may not be generalizable to other state universities, central universities, or private institutions with different IPR policies and resource allocations.
- 2. Self-Reported Data Bias:** The data relies on self reported responses regarding awareness and proficiency. This introduces the potential for social desirability bias, where respondents might overestimate their actual understanding of complex legal concepts like Fair Use or Trade Secrets.
- 3. Cross-Sectional Design:** The descriptive survey captures data at a single point in time. Therefore, it cannot establish causal relationships, such as whether specific training interventions directly lead to increased patent filings or reduced plagiarism instances.
- 4. Lack of Behavioral Metrics:** The study measures *perceived* awareness and *self-reported* tool usage rather than objective behavioral outcomes (e.g., actual number of patents filed, copyright registrations, or verified plagiarism incidents).

Future Research

To build upon the findings of this study, future research should consider the following directions:

- 1. Comparative Multi-Institutional Studies:** Conduct similar surveys across a diverse range of Indian universities (e.g., IITs, NITs, Central Universities, and private institutions) to compare IPR awareness levels and identify best practices in institutional IPR policy implementation.
- 2. Longitudinal Impact Studies:** Design longitudinal research to track the IPR behaviors of scholars before and after the implementation of targeted, hands on IPR workshops, measuring actual outcomes such as patent applications, technology transfer agreements, and open-access publications.
- 3. Faculty and Supervisor Perspectives:** Investigate the IPR awareness and attitudes of faculty members and research supervisors. Understanding the mentorship gap from the faculty's perspective is crucial for designing effective "train the trainer" programs.

Qualitative Explorations of Knowledge Gaps: Utilize focus groups and in depth interviews to explore *why* specific topics like Fair Use and Trade Secrets are poorly understood, and to uncover the specific barriers scholars face when attempting to commercialize their research.

4. Behavioral vs. Perceived Awareness: Develop objective testing modules or scenario based assessments to measure actual IPR comprehension and decision making, moving beyond self reported familiarity to evaluate true functional literacy in IP law.

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