PLATINUM

October 12, 2005

VIA HAND-DELIVERY (WITH ATTACHMENTS)
and ELECTRONIC SUBMISSION (WITHOUT ATTACHMENTS)

Federal Trade Commission
Office of the Secretary
Room 135-H (Annex Y)
600 Pennsylvania Avenue, NW
Washington DC 20580

Re: Jewelry Guides, Matter No. G711001

Dear Sir or Madam:

Platinum Guild International USA ("PGI") respectfully submits these comments to the Federal Trade Commission (the "FTC" or the "Commission") in response to its July 6, 2005 *Federal Register* notice[1] requesting public input on whether the platinum section of the FTC Guides for the Jewelry, Precious Metals, and Pewter Industries ("Guides" or "Jewelry Guides") should be amended to permit the marking of products containing between 500 and 850 parts per thousand ("ppt") pure platinum and no other platinum group metals ("PGMs") as platinum.

As explained below, due to the potential for significant consumer confusion and deception - as confirmed by empirical data contained in these comments - PGI strongly supports the amendment of the Guides to prohibit the use of the word "platinum" or any abbreviation thereof, to mark or describe products composed of between 500 and 850 ppt pure platinum and no other PGMs. Similarly, for the exact same reasons identified herein, PGI also supports the amendment of the Guides to prohibit products composed of between 500 and 850 parts per thousand pure platinum and less than 950 parts per thousand PGMs.[2]

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[1] 70 Fed. Reg. 38834 (July 6, 2005).

[2] Although the FTC limited its inquiry to products composed of between 500 and 850 ppt pure platinum and no PGMs, identical issues with regard to consumer expectations and injury would arise in the event variant alloys would be introduced into the marketplace composed of between 500 and 850 ppt pure platinum combined with a small amount of PGMs and the remainder base metals (e.g. an alloy containing 510 ppt pure platinum, 90 ppt PGMs, 400 ppt base metals). Accordingly, in an effort to avoid ambiguity, we believe it would be appropriate to make clear that products not containing at least 950 ppt PGMs of which at least 500 ppt is pure platinum should also not be marked or described as "platinum."

PGI is the United States arm of the worldwide marketing and educational resource center for the platinum industry. For more than 13 years, PGI has been the industry leader in providing the American jewelry industry with educational, marketing, advertising, promotional, sales and technical manufacturing support. Our organization has also provided American consumers with literature describing the benefits of platinum jewelry and we have worked with consumers in educating them about their purchasing decisions.

Although beyond the scope of this proceeding, PGI would like to make clear that it would ideally endorse modifying the Guides to be entirely consistent with those International Standards Organization ("ISO") standards that preclude marking or describing products as platinum unless they contain at least 850 ppt pure platinum. Nonetheless, since this issue was not raised by the FTC, at a minimum PGI believes ISO standards should be adopted with regard to the prohibition on products containing between 500 and 850 ppt pure platinum and no other PGMs.

PGI would also like to make clear that our comments are not intended to denigrate any specific products, including any of the new lower purity platinum/base metal alloys being introduced into the market today. Rather, our comments reflect an issue of broader significance - - consumer confidence in the quality and integrity of platinum and whether consumer expectations regarding platinum jewelry are satisfied.

As explained below in Section I, it has been our understanding that the current guides plainly prohibit products containing between 500 and 850 ppt pure platinum and no other PGMs to be marked or described as platinum. Even if they did not, however, as explained in Section II we have conducted a consumer survey that clearly demonstrates that significant consumer confusion and deception would result if lower purity platinum products with no PGMs are marked or promoted as platinum.

Specifically, in order to respond to the questions posed by the FTC in its *Federal Register* notice, PGI retained Dr. Thomas J. Maronick to conduct a consumer perception study to assess consumer expectations associated with platinum jewelry. Dr. Maronick was the Director of the Office of Impact Evaluation at the FTC's Bureau of Consumer Protection from 1980 to 1994, where he was responsible for coordinating FTC consumer research. Dr. Maronick's consumer perception study entitled, "*Platinum Awareness Study: An Empirical Analysis of Consumers' Perceptions of Platinum as an Option in Engagement Ring Settings*" ("Platinum Awareness Study"),[3] reveals that platinum's high level of purity is both its most distinctive and appealing quality.

Not only do a majority of consumers expect an engagement ring referred to or marked as "platinum" to contain a substantial percentage of pure platinum, but they also value certain properties associated with pure platinum such as durability, tarnish resistance, hypoallergenicity,

[3] Maronick, Thomas J., "*Platinum Awareness Study: An Empirical Analysis of Consumers' Perceptions of Platinum as an Option in Engagement Ring Settings*" (July 2005). The Platinum Awareness Study is provided as Attachment A to these comments. The Platinum Awareness Study includes three appendices, one of which is a CD-ROM.

security of the stone, and the look of the setting over time. The study reveals, however, that consumers are not experts in precious metal content and do not comprehend the complex differences associated with various platinum alloys. Thus, even if the content of such new alloys is disclosed, the vast majority of consumers would not understand how the content and properties of such alloys differ from traditional platinum. For that reason, the study concludes by noting that it is "highly doubtful that the level and depth of information consumers consider important prior to purchase can be provided in any meaningful way for a product promoted as 'platinum' but containing significantly less 'platinum' than the pure platinum jewelry currently being sold in the U.S. market."

The Platinum Awareness Study entirely supports the statutory provisions in five states, California, New York, New Jersey, Illinois, and Wisconsin, that prohibit products containing between 500 and 850 ppt pure platinum and no other PGMs from being marked or described as platinum. PGI is in fact unaware of even a single state that expressly authorizes such products. We believe the FTC should take these state laws into consideration when crafting its own Guides.

In addition to the Platinum Awareness Study, PGI has also sponsored research into the properties of alloys containing between 500 to 850 ppt pure platinum and no PGMs. These studies, which are attached, confirm that such alloys may contain properties that differ significantly from traditional platinum jewelry sold in the United States and throughout the world and would therefore fail to satisfy consumer expectations associated with platinum jewelry.

Based upon the above, we believe the FTC should not experiment with American consumers and permit alloys prohibited from being called platinum in other countries, and up until now in the United States, for the first time to be marked or described in the U.S. as platinum. The understood status quo, which has been quite effective in avoiding consumer confusion and establishing accurate consumer expectations associated with platinum jewelry, should simply not be abandoned - particularly when a simple and easily implemented solution exists that would both encourage competition and prevent consumer confusion and deception. Specifically, new alloys combining lower purity platinum with an amalgamation of diverse base metals should be permitted to enter the market – as long as they are not marked, described, or referred to as platinum.

Otherwise, we believe the FTC would be opening Pandora's box where new alloys with unforeseen amalgamations of materials with widely diverse properties could be introduced into the marketplace as platinum – in clear contravention of consumer expectations regarding platinum purity and platinum properties.

We emphasize that we agree with the comment in the FTC's February 2, 2005 staff opinion letter that lower purity platinum/base metal alloys are "sufficiently different" from the traditional platinum products available today, and need to be treated differently. We also agree with the FTC staff that simple stamping of jewelry content is not sufficient to prevent consumer confusion. As noted in the FTC Deception Policy Statement, there are situations where

"[w]ritten disclosures or fine print may be insufficient to correct a misleading representation."[4] In this case, as demonstrated by the Platinum Awareness Study, we believe it is inherently misleading to refer to a piece of jewelry as "platinum" when it contains lower purity platinum combined with high levels of base metals – and we believe such a claim is not capable of being cured by qualifying language. There is, in fact, precedent for this conclusion in the Jewelry Guides themselves, as the FTC has concluded that it is misleading and deceptive for jewelry containing less than 50% pure platinum to be marked or described as platinum (regardless of content disclosure or qualifying language).

We have responded, below, to the questions posed by the FTC and have discussed, in Section III, how the Guides should be amended to avoid consumer confusion and deception.

I. Background on the FTC Platinum Guides

The FTC Jewelry Guides have existed in some form since 1918. For over 75 years, the Guides and their predecessors have been widely used by the jewelry industry to provide accurate, truthful information to consumers about their products.[5] The Guides address claims made not only about diamonds, gemstones, and pearl products, but precious metals such as platinum and gold. Fundamentally, the Guides have met the FTC's goal of "prevent[ing] unfairness and deception."[6] As Jodie Bernstein, former Director of the FTC's Bureau of Consumer Protection acknowledged in a 1996 press release, the "Guides . . . are particularly important in an area where quality is hard for consumers to judge themselves and consumers must rely on the descriptions that sellers provide."[7] Due to widespread and voluntary compliance with these Guides, consumers can be confident about the jewelry they buy in the United States.

A. History of the FTC Platinum Guides

The current Platinum Guides, codified in 16 CFR § 23.7, have been the subject of great industry interest over the years since June 12, 1992, when the Jewelers Vigilance Committee ("JVC") petitioned the FTC to revise the Guides to (among other things) incorporate the text of five voluntary product standards ("VPS") formerly administered by the Bureau of Standards of the

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[4] *See Cliffdale Associates, Inc.*, 103 F.T.C. 110, 176 (1984), reprinted as appendix letter dated Oct. 14, 1983, from the Commission to The Honorable John D. Dingell, Chairman, Committee on Energy and Commerce, U.S. House of Representatives ("Deception Policy Statement").

[5] 16 C.F.R. Part 23. Industry Guides are administrative interpretations of the application of Section 5 of the FTC Act, 15 USC 45(a). The Commission issues industry guides to provide guidance for the public to conform to legal requirements. 70 Fed. Reg. at 38835.

[6] 61 Fed. Reg. 27224, 27225 (May 30, 1996).

[7] FTC Press Release, "*FTC Updates Guides For Advertising Of Jewelry - Guides harmonized with international standards and expanded to cover more products; obsolete provisions deleted*" (May 21, 1996), found at http://www.ftc.gov/opa/1996/05/jewelry2.htm.

U.S. Department of Commerce[8] into the Jewelry Guides.[9] One of the five standards was VPS 69-76 "Marking of Articles Made Wholly or in Part of Platinum," which prohibited products containing 500-850 ppt pure platinum and no PGMs from being called "platinum."

During the comment period, which ended on September 25, 1992, many industry participants commented on the need to simplify Commission guidance regarding platinum products and bring the guidance into closer accord with international standards. As a result, the Commission published a *Federal Register* notice soliciting public comment on several proposals to revise the Platinum Guides on May 30, 1996.[10] The Commission received numerous comments on the proposed revisions, reflecting overwhelming industry interest in the issue. Virtually all comments advocated changing the guidance regarding platinum markings to be consistent with international standards.[11] In response, the FTC published a final revision in 1997 revising the Platinum Guides to provide for different markings on articles of platinum depending on their relative "fineness."[12] Importantly, because the VPS was under consideration as a model for the Guides, the question of base metal alloys was always under consideration. In our view, the Guides that were produced by that comment process expressly rejected the use of base metals in platinum alloys, and only permitted PGM alloys to be marked and marketed as platinum.

B. Overview of the Current Platinum Guides

The Platinum Guides promulgated in 1997 contain a general prohibition on the deceptive use of the term "platinum,"[13] provide guidance as to when disclosures should be made to avoid "unfair or deceptive trade practices," and provide examples of markings or descriptions that the Commission would not consider "unfair or deceptive."[14] The FTC was explicit in defining the sole acceptable "platinum" alloy – one with PGMs. 16 C.F.R. § 23.7(c)(4). The FTC did not include or mention base metal combinations in the Guides.

PGI understood the Guides to explicitly require products labeled or marked "platinum" to be at least 50% pure platinum with the remainder of any alloy, up to 95%, being PGMs. PGMs, which include iridium, ruthenium, osmium, palladium, and rhodium are found in the same ore as platinum and are chemically very similar to platinum. This interpretation ensures that

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[8] The Bureau of Standards is now the National Institute of Standards of Technology.

[9] 57 Fed. Reg. 24998 (June 12, 1992).

[10] 61 Fed. Reg. at 27224.

[11] 62 Fed. Reg. 16669, 16670-16671 (April 8, 1997).

[12] *Id.*

[13] The Platinum Guides provide that it is "unfair or deceptive to use the words 'platinum,' 'iridium,' 'palladium,' 'ruthenium,' 'rhodium,' and 'osmium,' or any abbreviation to mark or describe all or part of an industry product if such marking or description misrepresents the product's true composition." 16 C.F.R. § 23.7(a).

[14] 16 C.F.R. § 23.7.

consumers purchasing "platinum" products receive actual platinum, and not a diluted platinum alloy containing more than five percent base metals. Indeed, when in 2004 a company began selling a 777 platinum/223 base metal product, it was careful to choose another name for the product – Polarium® – rather than describing or marketing the product as platinum. Thus, it was a shock to PGI to learn that the FTC was even considering expanding the Guides to allow base metal alloys to be marketed as platinum.

C. The Plain Language of the Platinum Guides Prohibits Marking as "Platinum" Products Containing 500-850 PPT Pure Platinum and No Other PGMs

It has long been our belief and understanding that the Platinum Guides prohibit products composed of between 500 and 850 ppt pure platinum and no other PGMs from being marked or described as "platinum." In fact, we are unaware of any such products historically marketed as platinum in the United States.[15] This interpretation is consistent with principles of statutory construction, as well as historical Department of Commerce requirements and state laws applicable to the marking of platinum products.

1. The Language of the Guides Prohibits Marking Base Metal Alloys as Platinum

Based on a common-sense reading of the current Guides, and legal analysis, PGI was under the impression that base metal alloys were strictly prohibited in platinum jewelry.[16] When a statute, or regulation or guideline specifies a manner of performance or conduct, there is an inference that all omissions should be understood as exclusions.[17] This principle is described by the well-known canon of construction, "*expressio unius est exclusio alterius*" ("*expressio unius*") -- defined as "to express or include one thing implies the exclusion of the other, or of the alternative."[18]

Accordingly, where the FTC detailed restrictions on using the term "platinum," addressed only a clearly defined class of PGMs when requiring strict reporting of the quantity and identity of

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[15] We were therefore surprised when the FTC recently indicated that even though the Guides do not authorize such products, such products are not expressly prohibited under the Guides as currently written. We strongly believe any ambiguity in the Guides must now we corrected.

[16] Even after reading the FTC staff opinion letter, it was our impression that the FTC was not precluding the application of established rules of statutory interpretation, but rather intentionally limiting its guidance to a "literal reading of the Guides" by noting that the Guides on their face neither "allow nor prohibit" promoting as "platinum" products containing 500-850 ppt pure platinum and no other PGMs.

[17] 2A. SUTHERLAND STATUTES AND STATUTORY CONSTRUCTION § 47:23 (6th ed. 2005).

[18] BLACK'S LAW DICTIONARY 620-21 (8th ed. 2004).

PGMs in platinum products, and did not discuss base metals at all,[19] *expressio unius* principles dictate that base metal platinum products would not be permitted.[20] Stated differently, by explicitly focusing on the PGM quantity and identity between 500 and 950 parts, the Guides allow only PGM constituents – not base metal or other constituents – to be used in this critical 450 part gap. Given that *expressio unius* is an accepted canon used by the FTC in its own case law,[21] and is used by the FTC in interpreting agency expressions of statutory requirements (as in agency regulations or guides),[22] it surely applies here.[23]

As a maxim, *expressio unius* is strongest when an action or duty is prescribed in one portion of a statute, regulation or guide, but not in another.[24] The common sense inference is that the drafters are cognizant of the language in the other sections and could have chosen to mirror that language, if they had wanted to do so. This principle is particularly instructive in the case at hand. As explained above, the Guides allow that a product labeled "platinum" could contain 50 ppt of any metal, but that at least 500 ppt need to be pure platinum and the remainder PGMs.[25] The regulations also require the precise labeling of both the quantity and identity of the PGMs in the critical 450 part gap.[26] The regulations go on to specifically name the PGMs as being "Platinum, Iridum, Palladium, Ruthenium, Rhodium, and Osmium."[27] There is no mention of base metals in any place within these provisions – even though the Department of Commerce Guides that were their predecessor included such reference. Had the regulations only been concerned with the 500 ppt platinum content, and been unconcerned about the constitution of the balance, they need not have clearly specified the permitted PGM components.

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[19] Misuse of the words "platinum," "iridium," "palladium," "ruthenium," "rhodium," and "osmium," 16 C.F.R. § 23.7(c).

[20] *See Forsyth v. Barr*, 19 F.3d 1527 (5th Cir. 1994); *Boudette v. Barnette*, 923 F.2d 754 (9th Cir. 1991); *Solano Garbage Co. v. Cheney*, 779 F. Supp. 477 (E.D. Cal. 1991); *Shoshone Indian Tribe of Wind River Reservation, Wyo. v. U.S.*, 58 Fed. Cl. 77 (2003).

[21] *See, i.e., Federal Trade Commission in the Matter of Alscap, Inc., et al.*, 60 F.T.C. 275, 285, 1962 WL 75801 ("[b]y the rule expressio unius est exclusio alterius, this [the statutorily prescribed method of obtaining a written guarantee from the manufacturer] is the only method by which a dealer in the United States can protect himself when relying on his supplier.").

[22] *See, i.e., Federal Trade Commission in the Matter of U.S. Life Credit Corp., et al.*, 92 F.T.C. 353, 360, 1978 WL 206101 ("[a]pplication of a variety of maxims of construction, including expressio unius est exclusio alterius, compels us, under the circumstances, to hold that Regulation Z does not require that a separate date appear on the insurance authorization . . . .").

[23] Indeed, *expressio unius* is a doctrine that merely codifies basic principles of construction. *See Indep. Ins. Agents of America, Inc. v. Hawke*, 211 F.3d 638, 643 (D.C. Cir. 2000) ("[e]ven without regard to the expressio unius principle, basic statutory construction requires that statutes be read to give each provision meaning").

[24] 2A. SUTHERLAND STATUTES AND STATUTORY CONSTRUCTION § 47:23 (6th ed. 2005).

[25] *See generally*, Misuse of the words "platinum," "iridium," "palladium," "ruthenium," "rhodium," and "osmium," 16 C.F.R. § 23.7.

[26] 16 C.F.R. § 23.7(c)(4).

[27] 16 C.F.R. § 23.7(a).

In contrast to the Platinum Guides, the FTC took a more permissive approach in the pewter section immediately following the platinum section.[28] With regard to pewter, the Guide permitted the use of the term "pewter" so long as it contains at least 900 ppt grade A Tin, "with the remainder *composed of metals appropriate for use in pewter.*"[29] The pewter Guide does not specify the identities of the metals appropriate for use in pewter, deliberately permitting flexibility for industry. Had similar flexibility been envisioned for platinum, the platinum provisions could have been drafted in that manner. Indeed, the platinum provisions were published in final form in the *Federal Register* on April 8, 1997,[30] well after the May 30, 1996 publication of the final pewter provisions.[31]

In sum, we believe there is nothing in the Platinum Guides or its legislative history that would suggest that the term "platinum" can be used to refer to the platinum/non-PGM alloys in question. Rather, we believe the plain wording of the Guides mandates the opposite. Now that the FTC is directly addressing this issue, and to the extent there is any confusion on the meaning of the "literal words" of the Guides, we propose below clarifying language to remove any doubt among industry participants.

2. Historical Department of Commerce Requirements and State Laws

PGI's interpretation of the Platinum Guides to exclude products containing 500-850 ppt pure platinum and no other PGMs is also consistent with historical Department of Commerce requirements and provisions in applicable state laws. The former Department of Commerce Standards ("CS") entitled "Marking of Articles Made Wholly or in Part of Platinum" ("CS-66-38") were issued in 1938 and later replaced by the Department of Commerce VPS in 1976. The current Guides replaced both Department of Commerce documents in 1997.[32]

Among other things, CS-66-38 governed the use of the term "platinum" when applied to products containing platinum combined with other metals. Notably, CS-66-38 Section 6(f) provided that:

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[28] Misrepresentation as to content of pewter, 16 C.F.R. § 23.8.

[29] 16 C.F.R. § 23.8(b) (emphasis added).

[30] 61 Fed. Reg. at 16675-16687. To be sure, the presumptive conclusiveness of the plain text created by *expressio unius* can be overcome by "a strong indication of contrary legislative intent or policy" or a finding that literal interpretation would "thwart the legislative intent made apparent by the entire act." 2A. SUTHERLAND STATUTES AND STATUTORY CONSTRUCTION § 47:23, 47:25 (6th ed. 2005). However, a thorough examination of the platinum product labeling regulations and the history of their promulgation has revealed neither a strong indication of legislative intent nor a clearly expressed policy to permit ignoring the clear instructions set forth in the regulations.

[31] 61 Fed. Reg. 27178, 27212-27222 (May 30, 1996).

[32] 61 Fed. Reg. at 16669.

> An article composed of platinum and any other material or metal not resembling, appearing, or purporting to be platinum may be marked with the quality mark "platinum," provided all parts or portions of such article purporting to be platinum, or reasonably resembling or appearing to be platinum shall be at least 985 parts per thousand pure platinum.

This provision was made part of the VPS-69-76, also entitled "Marking of Articles Made Wholly or in Part of Platinum," which replaced CS-66-38. Furthermore, California, New York, New Jersey, Illinois, and Wisconsin, representing some of the largest jewelry markets in the country, have state laws governing the appropriate marking of platinum products.[33] These laws contain provisions virtually identical to that of CS-66-38 Section 6(f) and similarly prohibit the use of the term "platinum" or any abbreviation thereof to describe a product composed of 500-850 ppt pure platinum and no other PGMs. It is simply not sensible to establish a federal platinum standard that does not take appropriate state law provisions, applicable to some of the largest jewelry markets in the United States, into consideration.

This historical information is significant for two purposes: both to demonstrate that the base metal question was present when the Guides were last revised in 1997,[34] and as a further reason to prohibit their introduction as "platinum" products today.

D. Request for Comments

Given the public interest in the issue and the purported confusion of some as to whether they could mark or describe as platinum products that contain 500-850 ppt pure platinum but no other PGMs, the FTC published a *Federal Register* notice on July 6, 2005 soliciting comment on whether the Platinum Guides should be amended to address with particularity products that contain 500-850 ppt pure platinum and no other PGMs.[35] The FTC also requested comments that would address the following additional questions:

- Is there empirical evidence on what consumers generally expect in terms of performance or other objective qualities when purchasing a product marked or described as platinum?

- Are products containing 500-850 ppt pure platinum and no other PGMs currently being marketed, and if so, how? Is there empirical evidence, e.g., copy testing or other research,

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[33] CAL. BUS. & PROF. CODE § 22121 (2004); N.Y. GEN. BUS. LAW ART. 13-A (2004); N.J. STAT. ANN. § 51:6-5 (2004); 815 ILL. COMP. STAT. 395/0.01 (2004); WIS. ADMIN. CODE § 134.33 (2004). *See also* Elly Rosen, "*Showing Your Metal*," AJM Magazine (May, 1998).

[34] When soliciting comments to revise the Guides in 1992, the FTC proposed to adopt the VPS and incorporate it into the FTC guides. 57 Fed. Reg. at 24999.

[35] 70 Fed. Reg. 38834.

as to how consumers interpret the disclosures or marketing materials, or proposed disclosures or marketing materials, accompanying such products?

- For products containing 500-850 ppt pure platinum and no other PGMs what, if any, additional information, in addition to disclosure of the product composition, may be necessary to prevent deception under Section 5 of the FTC Act? How do these disclosures compare to disclosures already required for other jewelry products, for example, gold?

- Are there significant differences between 500-850 ppt pure platinum alloys with no PGMs and other platinum products in terms of durability, tarnish, hypoallergenicity, ability to hold settings, or similar qualities?

- How would a product containing 500 ppt pure platinum and no other PGM be marked if it were being sold outside the United States?

- Should the platinum section of the Jewelry Guides be amended to address other products that contain platinum, such as platinum-clad, platinum-filled, platinum-plated, platinum-coated, or platinum overlay products that are not currently addressed in the section?

Responses to each of these bulleted questions are provided below in Section II. An extensive discussion on whether the Platinum Guides should be amended to address with particularity products that contain 500-850 ppt pure platinum and no other PGMs is provided in Section III.

II. Data and Empirical Evidence in Response to FTC Questions

A. Is There Empirical Evidence On What Consumers Generally Expect In Terms of Performance or Other Objective Qualities When Purchasing A Product Marked or Described As Platinum?

The Platinum Awareness Study, as well as a consumer study conducted by Hall and Partners entitled "*Platinum Brand and Advertising Tracking Pre Wave*" ("Hall and Partners Study")[36] provide a plethora of empirical evidence supporting the conclusion that consumers generally expect a "pure" product when purchasing a product marked or described as "platinum" and that consumers would be confused and misled by alloyed products containing base metals from being sold as platinum.

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[36] Hall and Partners USA Inc., "*Platinum Brand and Advertising Tracking Pre Wave*," at 16 (September 2003). 81% of women shopping for an engagement ring agreed that "pure" was a characteristic of platinum. The Hall and Partners Study is provided as Attachment B to these comments.

As described immediately below, the Platinum Awareness Study reveals that: (1) consumers value properties associated with pure platinum such as tarnish resistance, durability, stone security, hypoallergenicity, and the look of the setting over time; (2) consumers expect to be informed about the specific properties of an engagement ring containing significant amount of base metals prior to purchase; (3) mere content disclosures are insufficient to avoid consumer confusion; and (4) it is "highly doubtful" that the level and depth of information consumers consider important prior to purchasing an engagement ring can be provided in any meaningful way for a product composed of 500-850 ppt pure platinum and no PGMs.

1. Platinum Awareness Study

In response to the FTC's request for empirical evidence, PGI commissioned Dr. Thomas J. Maronick, DBA, JD, to conduct the Platinum Awareness Study, which is provided as Attachment A to these comments. Through a series of questions[37] presented to consumer respondents, the Platinum Awareness Study sought to:

- Assess consumers' level of knowledge about different precious metals used in settings for engagement rings and the importance of selected properties of precious metals in the selection of an engagement ring setting.

- Assess consumers' level of knowledge about the amount of precious metals in various types of metals used in engagement rings, including platinum, silver, yellow, and white gold.

- Assess the importance of, and consumers' expectations regarding, the amount of platinum and PGMs in an engagement ring promoted as "platinum."

- Determine what information about the properties of engagement rings promoted as "platinum" consumers would like to have and where they would expect to obtain such information.

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[37] The study participants responded to a variety of questions related to: (1) the importance of the purity of precious metals when selecting an engagement ring; (2) their level of knowledge about the precious metals used in settings for engagement rings; (3) the amount of platinum they would expect in a platinum engagement ring; (4) the importance of knowing the percentage of the precious metal in an engagement ring setting; (5) expectations regarding how to learn about the percentage of base metals in an engagement ring; (6) expectations regarding engagement rings called platinum with 40% base metals; (7) expectations regarding being called platinum if informed prior to purchase that an engagement ring contained 40% or more of base metals; (8) expectations regarding being called platinum if informed that an engagement ring contained 40% or more of base metals but has all the properties of platinum; (9) expectations regarding being called platinum if informed that an engagement ring contained 40% or more of base metals but without all the properties of platinum; (10) information they would like to know about the properties of engagement rings with 40% base metals prior to purchase; (11) their understanding of the term "14k" and "18k;" (12) their understanding of ".585 plat, 0 pgm;" (13) their understanding of ".585 plat, 415 CO/CU;" and (14) their expectations about standards for platinum in the U.S. and other countries.

- Assess consumers' knowledge and understanding about specific claims related to the amount of platinum and PGMs in jewelry, including engagement rings.[38]

Respondents were asked about an engagement ring with 40% base metals - a percentage that represents an example of a product at the higher end of base metal content in products promoted as platinum, was used as a proxy for lower purity platinum products.[39]

The Platinum Awareness Study reached four major findings, each of which suggest that products comprised of between 500-850 ppt pure platinum and no other PGMs cannot be marked or described as "platinum" without creating significant consumer confusion.

First, the study reveals that consumers expect a product labeled "platinum" to contain a substantial percentage of pure platinum.[40] Specifically:

- Over 75% of respondents indicated that the purity of the precious metal in the setting was "very important" or "important" in their decision,[41] and over 50% of respondents expect an engagement ring labeled "platinum" to contain 80% or more pure platinum.[42]
- A substantial percentage of consumers do not expect a product to be called "platinum" if it contains 40% base metals, even if it is assumed to have all the properties of pure platinum.[43]
- Less than one-third of respondents indicated that they would "definitely" or "probably" expect an engagement ring to be called "platinum" if it has 40% or more base metals, even if they were informed of the base metal content prior to the purchase of the ring.[44]

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[38] Platinum Awareness Study at 3.

[39] *Id.* Data for the study were collected from a sample of 332 consumers who were members of the TNS-NFO ("NFO") MySurvey Consumer Mail Panel. To qualify for the study, individuals had to be between the ages of 21-34, have a personal annual income of at least $30,000 per year, have had at least some college, not be married or engaged at the time of the survey but expect to be engaged in the next twelve months, and expect to have at least some role in the selection of the engagement ring. Approximately half of the sample was male and half female. The respondents are not only in the target market for an engagement ring, but they have at least some knowledge about platinum as an option when considering an engagement ring, and are willing to at least consider platinum as an option.

[40] *Id.* at 28.

[41] *Id.* at 10.

[42] *Id.* at 28.

[43] *Id.* at 17.

[44] *Id.* at 16.

- If the engagement ring had 40% base metals and did not have all the properties of platinum such as durability, tarnish resistance, hypoallergenicity, security of stone, etc., the majority of respondents (58.4%) indicated it "definitely" or "probably" should not be called platinum.[45]

The Platinum Awareness Study concludes that this data "suggests that any attempt to promote a product as 'platinum' that does not contain a substantially high percentage of pure platinum is likely to deceive consumers, particularly if the product does not contain all the properties of pure platinum and/or such properties are not disclosed."[46] This finding is consistent with the Hall and Partners Study, where the large majority of consumers agreed with the statement "platinum is pure."[47]

Second, durability, tarnish resistance, hypoallergenicity, security of the stone, type and purity of the precious metal, and the look of the setting over time are important to all consumers in the selection of an engagement ring.[48] The study revealed that consumers would want to know about these factors prior to purchase if the product being offered has 40% base metals. The study notes that "this raises questions about whether it is possible and how to adequately inform consumers regarding the content and properties of products promoted as 'platinum' but contain substantial percentages of base metals."[49]

Third, consumers have identified three primary sources of information regarding content and properties of engagement rings: (1) the sales representative; (2) tags on the setting; and (3) information stamped on the inside of the ring setting, with a substantial percentage looking to multiple sources for information.[50] While it may be possible to stamp the percentage of the precious metal on the inside of the ring setting, many consumers indicated that they wanted more than one source of written information to communicate to them information about the jewelry, and only a few consumers knew the meaning of the stamped percentage. The study concludes by noting that, "it is clearly impossible to provide . . . information deemed important (durability, tarnish resistance, look over time) on the inside of the ring, and questionable whether it is possible to provide this information in a meaningful and non-deceptive manner in a small tag attached to the ring."[51]

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[45] *Id.* at 21.

[46] *Id.* at 28.

[47] Hall and Partners Study at 16.

[48] Platinum Awareness Study at 28.

[49] *Id.* at 28.

[50] *Id.* at 29.

[51] *Id.*

Fourth, and finally, the study revealed that most consumers do not know what "14kt" means and the vast majority (96%) do not understand what ".585 plat, 0 pgm" or what ".585 plat, 415 CO/CU" means.[52] For example, only two respondents out of 332 correctly indicated that ".585 plat, 0 pgm" meant that the product had 58.5% platinum and 0% PGMs.[53]

These findings suggest that products composed of 500-850 ppt pure platinum and no PGMs present a significant risk of consumer confusion, particularly if these products do not have all the properties associated with pure platinum. Moreover, the study concludes that it is "highly doubtful that the level and depth of information consumers consider important" when purchasing a platinum engagement ring containing significant amounts of base metals can be provided in any meaningful way.[54]

2. Hall and Partners Study

A September 2003 study conducted by Hall and Partners USA Inc. also helps to shed light on consumer expectations and knowledge of "platinum." The Hall and Partners study revealed that both men and women view platinum as a leading precious metal known for its pure and enduring properties. These findings resulted from 600 interviews conducted online.[55] The respondents were women between the ages of 18-34 who had an income of greater than $30,000 and men between the ages of 25-34 who had an income of greater than $40,000. Individuals in both groups completed some college.[56] Most significantly, approximately 80% of female consumers understood that platinum products were "pure."[57] In addition to highlighting the pure aspects of platinum, the study revealed that only 22% of consumers felt sales associates helped them understand the difference between various metals.[58] This, like the Platinum Awareness Study, suggests that it will be difficult, if not impossible, to provide consumers with sufficient disclosures and information on platinum products containing 500-850 ppt pure platinum and no PGMs at the point of sale.

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[52] *Id.* at29.

[53] *Id.* at 25.

[54] *Id.* at 29.

[55] Hall and Partners Study at 2.

[56] *Id.*

[57] *Id.* at 16.

[58] *Id.* at 33.

B. Are Products Containing 500-850 PPT Pure Platinum and No Other PGMs Currently Being Marketed, and If So, How? Is There Empirical Evidence, e.g., Copy Testing or Other Research, As To How Consumers Interpret the Disclosures or Marketing Materials, or Proposed Disclosures or Marketing Materials, Accompanying Such Products?

There are platinum/non-PGM alloys currently being marketed in the United States. With one exception, most manufacturers have avoided marking or describing their products as platinum. For example, a well known designer recently came out with a 777 platinum/223 base metal product, which is marketed under the brand name "Polarium®" to avoid consumer confusion. This alloy, which is known for its magnetic properties, consists of 70-95% platinum and 5-30% cobalt. By marketing this alloy as Polarium® instead of "platinum," the manufacturer ensured that consumers would not confuse this product with those traditionally marketed as platinum. PGI supports this reasonable approach, which permits consumer choice while avoiding consumer confusion or deception.

C. For Products Containing 500-850 PPT Pure Platinum and No Other PGMs What, If Any, Additional Information, In Addition to Disclosure of the Product Composition, May Be Necessary To Prevent Deception Under Section 5 of the FTC Act?

The FTC likely posed this question knowing that it is notoriously difficult to educate consumers of jewelry at the retail level. It is generally acknowledged that there is insufficient space on the inside of a ring, or other jewelry, to incorporate the kinds of complex disclosures consumers find important prior to purchasing platinum jewelry. In addition, due to limited retail space and appearance concerns, we understand there is a general aversion to attaching lengthy disclosure tags to jewelry sold at the retail level. Although sales associates are another potential source of product information, the Hall and Partners study revealed that only 22-24% of consumers felt that sales associates helped them understand the difference between different metals.[59]

Due to these practical realities, we do not believe consumers would be capable of receiving appropriate and prominent disclosures associated with a platinum/non-PGM alloy if sold in a retail environment. This conclusion is supported by the Platinum Awareness Study which notes that it is "highly doubtful that the level and depth of information consumers consider important prior to purchase can be provided in any meaningful way for a product promoted as 'platinum' but containing significantly less platinum than the pure platinum jewelry currently being sold in the U.S. market."[60]

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[59] Hall and Partners Study at 33.

[60] Platinum Awareness Study at 29. If, contrary to the above, the FTC nonetheless decides to permit low purity platinum products to carry the platinum mark, we believe it would be imperative that information aside from product composition be disclosed to consumers in order to prevent deception. Based upon consumer expectations, we believe consumers may have a wide range of material concerns that require prominent disclosures, including but

D. How Do the Above Disclosures Compare to Disclosures Already Required for Other Jewelry Products, Such as Gold?

PGI respectfully suggests that a comparison to gold products is not useful because unlike gold, consumers have greater expectations that platinum is "pure." In addition, consumers are already confused with the current marking and promotion of gold products and the FTC should not expand the confusing terminology to a new market segment absent a compelling reason.

By way of background, gold is the sole precious metal identified by its karat rating. The higher the karat, the higher the proportion of gold in the piece of jewelry. For example, 24K gold is pure while 14K gold is 58.5 percent pure gold and the remainder alloys. The gold portion of the Jewelry Guides also distinguishes between karat-gold and gold-plated jewelry (jewelry with a layer of at least 10K gold bonded to a base metal).[61] The Platinum Awareness Study, however, reveals that consumers do not know what 14K or 18K gold means. In fact, when respondents were asked whether they understood what the term "14kt" means, 82.2% of them did not know the answer.[62]

Moreover, experience with white gold, which is subject to the same standards as yellow gold with respect to legal markings, alloy content, and commercial designations, has proven to be problematic. To create white gold, yellow gold is alloyed with metals such nickel, palladium, and silver to create a white metal.

Retailers have received numerous complaints about white gold from consumers because of its propensity to tarnish, and because it is a source of allergies in some people. Christopher W. Corti, director of international technology for the World Gold Council in London notes that turning gold white can occasionally make it: (1) prone to wear because of a rhodium plating often needed to make the metal look truly white; and (2) can be a source of skin allergies in some

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not limited to: (1) the amount of non-PGM metals present in such an alloy, and how this differs from traditional platinum products; (2) the durability of such an alloy compared with traditional platinum products; (3) the degree to which such an alloy would tarnish as compared with traditional platinum products; (4) the ability of bench jewelers to work on such an alloy without damaging the jewelry, and the cost of such work, as compared with traditional platinum products; (5) the ability of bench jewelers to resize jewelry containing such an alloy without jeopardizing the integrity of the jewelry; (6) whether jewelry containing such an alloy would provide as secure of a setting for diamonds as traditional platinum jewelry; and (7) whether jewelry containing such an alloy would have the same hypoallergenic qualities as traditional platinum jewelry. Consumers consider these factors to be important when purchasing platinum jewelry. Platinum Awareness Study at 12. However, PGI doubts that any such disclosure is actually possible, and the Platinum Awareness study supports rejecting disclosure as a viable vehicle for consumer education.

[61] 16 C.F.R. § 23.4.

[62] Platinum Awareness Study at 24.

people, usually because of the addition of a nickel alloy.[63] Although the majority of white gold jewelry is actually a very pale gold plated with rhodium, many consumers have the impression that they are buying unplated white gold.[64] The FTC currently has the opportunity and responsibility to prevent these types of complaints for platinum products.

E. Are There Significant Differences Between 500-850 Pure Platinum Alloys With No PGMs and Other Platinum Products in Terms of Durability, Tarnish Resistance, Hypoallergenicity, Ability to Hold Settings, or Similar Qualities? What Evidence is There on These Issues?

1. Overview

When consumers think of platinum, they think of it as pure, rare, expensive, naturally white, high quality, and durable. The introduction of a variety of different base metals into platinum alloys could result in significant changes in the properties and behaviors of platinum as compared to current platinum alloys. This could increase the incidence of problems experienced by consumers, in terms of allergic reactions and in sizing and repair. Experience with white gold shows that this is a very real possibility.

These new base metal alloys could particularly add considerable complexity and costs to working with platinum for bench jewelers, and the refining process for manufacturers, casters, and refiners. Bench jewelers may have a difficult time distinguishing between platinum alloys during repair procedures, particularly if a new type of platinum product emerges that contains a new type of marking. Oxidation issues may also present a problem for bench jewelers if there are significant levels of non-PGMs. For example, a high copper content would require the bench jewelers to use atmosphere control equipment that most bench jewelers may not have. Finally, with regard to resizing, the melting point of a ring containing significant non-PGMs may be significantly reduced, which can lead to melting/alteration of the ring.

PGI is aware of no evidence suggesting that new alloys containing between 500 and 850 ppt pure platinum and no other PGMs would have the same properties as traditional platinum jewelry sold in the United States. In fact, due to the multitude of base metals that could be alloyed with platinum, we believe it is self-evident that such alloys would in fact have vastly different properties from traditional platinum. We have provided, in the following section, test results that confirm the vastly different properties associated with such base metal alloys.

Finally, it should be emphasized that even if a hypothetical lower purity platinum/base metal alloy could be developed that shares many of the same properties as pure platinum, we believe

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[63] "*Defining White Gold*," Professional Jeweler Magazine (September 2003), found at http://www.professionaljeweler.com/archives/articles/2003/sep03/0903mm.html. For more on the allergic properties of nickel in white gold, see http://www.gold.org/discover/sci_indu/GTech/2000_28/roy.pdf.

[64] *Defining White Gold, supra* note 63.

the FTC would still not be justified in opening the marketplace to an entire category of new products that may have vastly different properties from traditional platinum. In our view, FTC regulatory policy should be based upon protecting the vast majority of consumers, not protecting a hypothetical product (which would likely be patented) that would not reflect the range of base metal alloys that would inundate the market if left unfettered by the FTC. As noted previously, we believe such a product should be permitted to enter the market, but should not be permitted to be marked or described as platinum.

2. Testing of Low Purity Platinum Alloys

PGI provided a hypothetical sample of a lower purity platinum/base metal alloy (an alloy that is not currently on the market) to Hoover & Strong, a well recognized metallurgic testing and laboratory company, for property testing. The alloy provided to Hoover & Strong contained 59.2% platinum, 36.59% copper, and 3.90% cobalt (along with trace amounts of gold, silver, and nickel). Test results are provided as Attachment C.

Testing clearly indicates that this sample alloy had inferior wear resistance as compared with traditional platinum alloys (i.e. 9.3% weight loss compared with 7.1% for traditional platinum). Moreover, the sample alloy was not comparable to traditional platinum alloys with regard to oxidation resistance testing. Finally, and perhaps most importantly, the sample alloy was unable to survive standard welding/soldering procedures for sizing. In fact, the study noted that without the use of "flux" during the soldering process, "there was a poor joint due to the heavy oxide layer generated.... Fluxing the joint prior to soldering improved matters... but there was still evidence of oxide after soldering, and on close examination there was an incomplete joint." Not surprisingly, welding trials provided similar inferior results as the soldering trials.

Separately, Daniel Ballard of Precious MetalsWest/Fine Gold tested various likely alloys of platinum and other base metals, including copper, cobalt, zinc and silver (all of which are commonly used in gold alloys). Test results are provided in Attachment D. Specifically, Mr. Ballard testing three alloys, all containing 585 ppt pure platinum. The first alloy contained 250 ppt copper, 103 ppt nickel, and 62 ppt zinc, the second alloy contained 208 ppt copper and 207 ppt cobalt, and the third alloy contained 208 ppt copper and 207 ppt silver.

Mr. Ballard found that these lower purity base metal alloys did not come close to meeting the current performance criteria of traditional platinum products. Particularly noteworthy was the fact that the new alloys demonstrated significant vulnerability to oxidization and tarnishing – effects not seen with traditional pure platinum products.

Mr. Ballard concluded by stating the following:

> In my personal albeit studied opinion, base metal 585 platinum will act much like nickel based white gold: Easy to oxidize and

difficult to roll or cast. Non PGM low content platinum may save some money, but this will come with some negative trade offs:

- alloys that are difficult to blend or cast
- alloys that oxidize
- alloys that tarnish
- platinum alloys that behave similar to white gold, rather than platinum
- alloys that may or may not be hypo-allergenic.

The test results are unequivocal – lower purity platinum alloys containing significant amounts of base metals may have vastly different properties than traditional platinum products sold in the United States.

3. Hypoallergenicity Concerns

Platinum is widely known for its hypoallergenic properties, and in fact many consumers purchase platinum solely due to such properties. It is well known, however, that nickel - the primary base metal currently used in white gold alloys - is capable of producing allergic reactions when added to jewelry. Specifically, the presence of nickel can result in Nickel Allergic Contact Dermatitis.[65] For that reason, the European market has banned non-occupational contact with nickel, and prohibits products with over 6% nickel from the market. Due to existing products introduced before the ban, however, it is estimated that nickel-plated clothing fasteners and jewelry in pierced ears has sensitized about 5-15% of females and about 0.5-1% of males. Of greatest importance, in the United States nickel allergies are also on the rise - up from 10% in the 1980's to approximately 15% today.

Although PGI would not expect responsible members of the jewelry industry to alloy nickel with platinum, we are unfortunately unable to rule out this possibility. Obviously, it would be a disaster for the American consumer if the metal they understood to be hypoallergenic – platinum – began producing rashes in even a small percentage of U.S. consumers. The possibility that nickel could be used as one of the base metals alloyed with platinum, however, strongly militates against expanding the Guides to allow such alloys.[66]

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[65] *See* http://www.nickelallergy.org/index.cfm/ci_id/99/la_id/1.htm. The data on nickel allergy presented above is largely taken from this nickel industry website publication.

[66] Moreover, the typical white gold alloy will oxidize when welded or soldered. While a boric acid or denatured alcohol fire coat can be used to minimize the oxidation during sizing, such techniques are only available because the soldering and welding temperatures used for sizing white gold are within the limitations of the fire coat, and will prevent fire scale oxidation during welding. For platinum products, however, welding temperatures would be expected to be outside the capabilities of a fire coat.

4. Conclusion

In sum, whether it is wearability, weight loss, hypoallergenicity, soldering and bench criteria, oxidization, or tarnishing, testing data indicate that base metal alloys simply do not meet the performance criteria associated with traditional platinum products. Quite obviously, consumers will be distraught if the platinum products they purchase begin to oxidize or tarnish, fail when given to the jeweler for sizing, or, worst of all, cause them rashes. Consumers today simply do not expect such results from platinum products, and pay more in part to avoid these risks.

Accordingly, due to the diverse properties associated with products containing between 500 and 850 ppt pure platinum and no PGMs, and the fact that these properties may differ significantly from traditional platinum jewelry, we believe the FTC should ensure that such lower purity alloys are not marked or described as platinum.

F. How Would a Product Containing 500 PPT Pure Platinum and No Other PGM Be Marked if it Were Being Sold Outside the United States? Is There an International Standard That Addresses a Product With This Composition?

1. ISO Standard

The ISO standard for platinum markings, ISO 9202:1991(E) "*Jewelry - Fineness of Precious Metal Alloys*," specifies a range of fineness of precious metal alloys recommended for use in the field of jewelry. It provides for three values in ppt for platinum jewelry: 950, 900, and 850. Since the ISO requires an 850 ppt pure platinum minimum, and many countries have adopted ISO standards as local law, products containing between 500 and 850 ppt pure platinum and no other PGMs would not generally be permitted to be marketed as "platinum" if sold outside the United States.

A recent survey conducted by CIBJO[67] revealed international support for this standard and the desire to restrict the use of the unqualified word "platinum" (or PT., Plat, or other national symbol) to describe platinum alloys that contain 850 ppt, or more, of pure platinum.[68] The majority of CIBJO members also believe that combinations of platinum and non-PGMs (including gold and silver) with fewer that 850 ppt pure platinum should not be marked, marketed or described using the word "platinum."[69] Rather, these items should be marked,

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[67] CIBJO, which is the acronym for the French phrase, Confédération International de la Bijouterie, Joaillerie, Orfèvrerie des Diamantes, Perles et Pierres, and which translates to International Confederation of Jewelry, Silverware, Diamonds and Stones, is the international jewelry confederation of national trade organizations.

[68] CIBJO Press Release, "*Overwhelming Agreement Among Nations to Keep Platinum Terminology for Products at 850 ppt Purity and Above*" (July 27, 2005), found at http://www.jckgroup.com/article/CA630271/jck?industry=Precious+Metals&industryid=673.

[69] The CIBJO Proposed Statement on Platinum Nomenclature is provided as Attachment E.

marketed or described using other names that do not mislead or confuse the buyer regarding the true composition of the metal alloy.

Consistent with these results, CIBJO President Gaetano Cavalieri remarked, "[t]he current ISO standard 9202 for platinum's purity not only ensures that consumers are buying a quality product when purchasing platinum jewelry, but it underscores the high level of purity that consumers worldwide have come to expect and understand when purchasing jewelry made of platinum. Clearly, CIBJO members believe that changes in these areas could result in consumer confusion and dissatisfaction."[70]

PGI encourages the FTC to maintain consistency with international standards. Not only has the FTC itself previously expressed a desire to maintain consistency with international standards, but also consistency is beneficial to consumers and the jewelry industry. Divergent national standards may create a number of unintended consequences such as technical barriers to trade.

2. FTC Obligation to Establish Guides Consistent with International Trade Statutes and Support for Consistency with International Standards

The FTC recognized in the Federal Register preamble to the final Guides that it has an obligation to establish Guides consistent with international trade statutes. The FTC specifically indicated that "[t]he Trade Agreements Act of 1979 states that no federal agency 'may engage in standards-related activity that creates unnecessary obstacles to the foreign commerce of the United States . . .'"[71] International standardization provides a vital context within which U.S. manufacturers can compete fairly in export markets in Europe and Asia, which are important sources of revenue and employment for a significant group of U.S. manufacturers.

Moreover, the FTC extensively refers to the international platinum standard in the preamble to the final Platinum Guides, and revised aspects of the Guides to maintain consistency with international standards.[72] In fact, the FTC explicitly noted that "[b]ased on the international standards reflected in the ISO standard and the request in the comments to utilize standards that are recognized internationally, the Commission has revised [a portion of the Platinum Guides]."[73] The FTC has repeatedly expressed its desire to maintain consistency with international standards. In an October 31, 1997 letter to the Consumer Products Directorate of Canada, former FTC Director Jodie Bernstein acknowledged that the "Commission revised the platinum section of the

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[70] CIBJO July 27, 2005 Press Release.

[71] 62 Fefd. Reg. at 16671, Footnote 19.

[72] *See id.* at. 16670-16672 for a complete discussion.

[73] *Id.* at 16671. Of course, the EU nickel standards noted above may be implicated to the extent that the base metal is used in platinum alloys.

Jewelry Guides to be consistent with the international standard established by ISO" and suggested that Canada consider adopting the international standard for articles containing 85 and 90 percent platinum "in order to avoid consumer confusion."[74]

3. Importance of International Consistency

Maintaining consistency with the ISO standard will be beneficial to both consumers and the jewelry industry. The widespread adoption of an international standard means that suppliers can base the development of their products and services on specifications that have wide acceptance in the jewelry industry. This, in turn, means that businesses using international standards are increasingly free to compete in markets around the world on a "level playing field." Conforming products and services to international standards provides consumers with assurance about their quality, safety and reliability.

The Platinum Awareness Study also supports adopting international standards for the benefit of consumers. When consumers were asked whether they would expect the standard for a ring to be called "platinum" to be the same in the United States as in other countries around the world, almost two-thirds of all respondents (64.7%) indicated that they would expect the standards to be the same with an additional 20.6% saying they didn't know or were not sure.[75] In light of increasing globalization and international travel and movement, consumers will be affected by varying definitions of platinum - particularly if they are concerned about their product's resale value. Accordingly, the FTC should maintain consistency with international standards for platinum jewelry.

G. Should the Platinum Section of the Jewelry Guides Be Amended to Address Other Products That Contain Platinum, Such as Platinum-Clad, Platinum-Filled, Platinum-Plated, Platinum-Coated, or Platinum Overlay Products, That are Not Currently Addressed in This Section?

PGI believes there is a definite need to amend the Guides to address platinum plated and coated products. At present, the thickness and purity of the coating or plate are not addressed at all. We believe it is imperative that these issues be addressed, and we therefore suggest adding a new section to the Guides that provides as follows:

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[74] FTC, October 31, 1977 "*Comment on Canadian Precious Metal s Marking Regulations*," at Footnote 6, found at http://www.ftc.gov/be/v970007.htm (emphasis added).

[75] Platinum Awareness Study at 26.

§23.7.2 Misrepresentation as to Platinum plating, covering, or coating.

(a) It is unfair or deceptive to misrepresent the thickness, weight ratio, or manner of application of any Platinum plating, covering, or coating on any surface of an industry product or part thereof.

(b) It is unfair or deceptive to mark, describe, or otherwise use the word "Platinum" (or its abbreviation) by itself or in combination with other words or numerical designations for all or part of an industry product that is not composed throughout of Platinum or Platinum alloy, but is surface-plated or coated with Platinum or Platinum alloy, unless the word "Platinum" (or its abbreviation) is adequately qualified to indicate that the product or part is only surface-plated.

(c) It is unfair or deceptive to mark, describe, or otherwise use the terms "Platinum Plate" or "Platinum Plated" (or any abbreviation) to describe all or part of an industry product, except as follows:

(1) The surface-plating with Platinum, applied by any process, shall be of such thickness and extent of surface coverage that reasonable durability is assured;

(2) The surface-plating of such article shall be composed of at least 850 parts per thousand pure Platinum and 100 parts per thousand other PGM;
NOTE: All provisions of §23.7.1 are applicable to the nomenclature and composition of any Platinum and Platinum alloy used for surface-coating or surface-plating.

(3) The minimum thickness of Platinum or Platinum alloy coating affixed on all significant surfaces of an industry product, by any process such as coating, electroplating, or deposition of any means shall be no less than one-quarter micron;

(4) The Platinum coating shall be of substantial thickness so that durable coverage of the base metal to which the coating has been affixed is assured.

(5) The exact thickness of the plate may be marked on the item, as for example "2 microns Pt. platinum plate" or "2μ Pt.P."
NOTE: If an industry product has a thicker coating or electroplating of plating on some areas than others, the minimum thickness of the plate should be marked.

(d) An industry product or part thereof may be marked or described as "Platinum Electroplate" or "Platinum Electroplated," or abbreviated as, for example, "Pt.E.P.," if there has been affixed to it all significant surfaces by an electrolytic process an electroplating of Platinum with a level of purity of at least 950 parts per thousand pure Platinum, which has a minimum thickness throughout equivalent to [ ]* (approximately [ ]* of an inch) of pure platinum. When the electroplating is of at least 950 parts per

thousand pure Platinum but does not meet the minimum thickness specified above, the marking or description may be "Platinum Flashed" or "Platinum Washed."

When the electroplating is of at least 950 parts per thousand pure Platinum and of a minimum thickness throughout equivalent to [ ]* microns (or approximately [ ]* of an inch) of pure Platinum, the marking or description may be "Heavy Platinum Electroplate" or "Heavy Platinum Electroplated."
When electroplatings qualify for the term "Platinum Electroplate" (or "Platinum Electroplated"), or "Heavy Platinum Electroplate" (or "Heavy Platinum Electroplated"), and have been applied by use of a particular kind of electrolytic process, the marking may be accompanied by identification of the process used, as for example, "Platinum Electroplated (X Process)" or "Heavy Platinum Electroplated (Y Process)."

* We understand that industry groups are currently researching appropriate and accurate numbers to insert for thickness standards, and that such numbers will be relayed to the FTC in the near future.

III. The Platinum Guides Should be Amended to Prohibit The Marking As Platinum of Products That Contain 500-850 PPT Pure Platinum and no other PGMs

A. The Guides Should Be Amended To Establish An Unambiguous and Transparent Standard that Precludes the Marking and Promotion of such Products as Platinum

In light of the extensive empirical evidence and consumer data presented in Section II, PGI respectfully requests that the FTC amend the Platinum Guides and provide for an unambiguous, transparent standard that precludes the marketing of products containing 500-850 ppt pure platinum and no PGMs as "platinum."

1. Consumer Expectations and Potential for Confusion

The Platinum Awareness Study and the Hall and Partners Studies described above confirm that platinum's high level of purity is both its most distinctive and appealing quality. Introducing the use of the platinum mark to relate to lower level purity platinum mixed with non-PGM base metals would result in consumer confusion and deception at the point of purchase. Jewelry is an emotional, expensive purchase, often made impulsively in the absence of extensive education. This means that jewelry purchases are particularly susceptible to misunderstanding and confusion.

The Platinum Awareness Study highlights the fact that consumers are not experts in precious metal content and do not comprehend the complex differences associated with various platinum

alloys. Even if the content of such jewelry is disclosed, the vast majority of consumers would not understand how this affects a product's similarity to traditional platinum. This is particularly troubling since sub-potent jewelry often appears identical to platinum at the point of sale.

The Platinum Awareness Study in particular demonstrates that product disclosures, such as stamping the alloy components of the ring, are insufficient to avoid such confusion. Product disclosures and the potential need to re-educate sales staff in order to protect consumers from confusion and deception may not only be difficult to execute, but could be prohibitively expensive, with no guarantee of success. Sales associates cannot ensure that correct information comparing all of the differences between a multitude of new alloys will be relayed to consumers at the point of sale. Not only are many purchases currently made over the Internet with no personal interaction, but also some salespeople operate under commission and may inadvertently encourage the purchase of a product without fully disclosing its limitations.

Consumer expectations have been formed based upon industry custom, state laws, and international marketing practices associated with platinum whereby products containing 58.5% platinum and 0 PGMs are not marked or identified as "platinum." When purchasing platinum jewelry, consumers should not fear that products they believed are traditional platinum are in fact not platinum – particularly if they travel outside the country and discover that laws in foreign countries prohibit their jewelry from being resold as platinum. The new alloys may not only affect consumers' perceived retail value, but also the time and cost associated with resizing platinum jewelry and the ability to resize the jewelry. Finally, it would be unfair to penalize those who have complied with the Guides to change the rules midstream.

2. A Variety of Lower Purity Platinum Products May Enter the Marketplace

A clear standard is also necessary because products that fall within the category of 500-850 ppt pure platinum and no PGM are wide-ranging. The marketplace could be inundated with strange alloys differing in base metal content and individual properties. Consumers would have no realistic way to comprehend how they all differ, which are priced appropriately, and which have good resale value.

It is not difficult to imagine the types of products, with varying percentages, content, and properties that could enter the marketplace claiming to be "platinum." Products with 50% pure platinum and 50% copper, 55% pure platinum and 45% lead, 60% pure platinum and 40% cobalt, could all enter the market and be promoted as "platinum." As demonstrated in alloy testing included in these comments, diverse alloys may have diverse properties that are entirely inconsistent with the properties of traditional platinum jewelry sold in the United States. There is no basis for the FTC to assume that such products/alloys would have the qualities of platinum expected by consumers – such as durability, tarnish resistance, hypoallergenicity, security of stone setting, etc.

3. The FTC Standard Should be Unambiguous and Transparent

The FTC must act immediately and establish an unambiguous and transparent standard, consistent with industry custom, to ensure that consumers are not mislead and to help consumers distinguish the 500-850 ppt pure platinum and no PGM class of products from those traditionally marketed as platinum. Not only do consumers deserve a clear standard to help guide them in their platinum purchases, but the multitude of products that could fall within this class, all with different properties and content, make a clear standard a necessity. Moreover, a clear standard would be easier to enforce by the FTC and would help retailers and manufacturers avoid violating the law.

B. The Guides Should Expressly Prohibit Products Composed of 500 to 850 PPT Pure Platinum and No Other PGMs

1. Proposed Standard

PGI encourages the FTC to make explicit what was previously implicit under the Platinum Guides. It has long been our belief and understanding of the Guides that products composed of 500-850 ppt pure platinum and no other PGMs should not be marked or described as platinum – and the Guides should be amended to reflect this.

Furthermore, although not directly asked by the FTC, we believe the standard applied to products composed of between 500-850 ppt pure platinum and no other PGMs should also be applied to variant alloys composed of between 500 and 850 ppt pure platinum combined with a small amount of PGMs and the remainder base metals (e.g. an alloy containing 510 ppt pure platinum, 90 ppt PGMs, and 400 ppt base metals).

Accordingly, in an effort to avoid another industry dispute (which may require FTC involvement), we believe it would be appropriate to make clear that products not containing at least 950 ppt PGMs and 500 ppt pure platinum should not be marked or described as "platinum." This solution addresses both classes of products.

Specifically, a standard that expressly requires a minimum of 950 parts per thousand PGMs and 500 parts per thousand pure platinum for a product to be marked or described as platinum would prohibit both: (1) products containing between 500 and 850 parts per thousand pure platinum and no other PGMs; and (2) products containing between 500 and 850 parts per thousand pure platinum combined with a small amount of PGMs and the remainder base metals (e.g. an alloy containing 510 ppt pure platinum, 90 ppt PGMs, and 400 ppt base metals).

We believe the FTC's decision to address both categories of products would be a logical outgrowth flowing from the agency's Federal Register notice, particularly as the Federal Register notice expressly indicated that "[p]latinum products that have been marketed thus far typically

contain over 85% pure platinum or contain a combination of pure platinum and platinum group metals [PGM] that total 95% PGM."[76]

We also believe the Guides should be amended to make clear that inappropriate use of the term "platinum" in marking, describing, or promoting a product is an unfair or deceptive practice, rather than an action that "may be misleading."

Accordingly, we encourage the FTC to revise the Platinum Guides as follows:

§23.7.1 Misuse of the words "Platinum," "Iridium," "Palladium," "Ruthenium," "Rhodium," and "Osmium."

(a) It is unfair or deceptive to use the words "Platinum," "Iridium," "Palladium," "Ruthenium," "Rhodium," and "Osmium" (or their abbreviation) to describe, mark or market all or part of any industry product that is not composed of the precious metal of the type described. The Platinum Group Metals (PGM) are Platinum, Iridium, Palladium, Ruthenium, Rhodium, and Osmium. The following abbreviations for each of the PGM may be used: "Plat." or "Pt." for Platinum; "Irid." or "Ir." for Iridium; "Pall." or "Pd." for Palladium; "Ruth." or "Ru." for Ruthenium; "Rhod." or "Rh." for Rhodium; and "Osmi." or "Os." for Osmium.

(b) It is unfair or deceptive to misrepresent the quantity of parts per thousand pure Platinum or PGM in an industry product.

(c) It is unfair or deceptive to mark, describe, or otherwise use the word "Platinum" (or its abbreviation) by itself or in combination with other words or numerical designations for all or part of an industry product, except as follows:

(1) If an article consists of at least 950 parts per thousand pure Platinum, the article may be marked "Platinum" (or its abbreviation) without any qualification or addition.

(2) If an article consists of at least 950 parts per thousand PGM, of which at least 850 parts per thousand are pure Platinum, the article may be marked with the word "Platinum" (or its abbreviation) immediately preceded by the numerical designation of the parts per thousand pure Platinum. Thus, the following markings may be used: "950Pt.," "950Plat.," "900Pt.," "900Plat.," "850Pt.," "850Plat."

(3) If an article consists of at least 950 parts per thousand PGM, of which at least 500 parts per thousand are pure Platinum, the article may be marked with the word

[76] 70 Fed. Reg. at 38835.

"Platinum" (or its abbreviation) immediately preceded by the numerical designation of the parts per thousand pure Platinum and the name of each PGM constituent immediately preceded by the numerical designation of the parts per thousand of each PGM, as for example, "600Pt.350Ir.," "600Plat.350Irid.," "550Pt.350Pd.50Ir.," "550Plat.350Pall.50Irid."

(d) It is unfair or deceptive to mark, describe, or otherwise use the word "Platinum" (or its abbreviation) by itself or in combination with other words or numerical designations for all or part of an industry product that does not consist of at least 950 parts per thousand PGM, of which at least 500 parts per thousand are pure Platinum.

In the alternative, in the event the FTC does not adopt the above suggestions, at a minimum we believe the following modifications to current Section 23.7(b)(3) of the Guides would be essential (modifications to the current Guides are underlined):

(b) The following are examples of markings or descriptions that are unfair or deceptive:

(3) Use of the word "Platinum" or any abbreviation thereof, to mark or describe any product that is not composed throughout of at least 500 parts per thousand pure Platinum and at least 950 parts per thousand PGM.

Based upon the information and data included in these comments, PGI believes the FTC has a sufficient basis to modify the Guides as described above. We do not believe there are any legal or public policy reasons to reopen the comment period once again prior to modification of the Guides in the above manner. Nonetheless, to the extent the FTC disagrees and reopens the comment period to solicit comments on a proposed modification to the Guides, we believe it would be imperative for the FTC to clearly express in the Federal Register its legal concerns regarding such products to prevent and discourage widespread interim marketing and subsequent consumer injury and deception prior to the finalization of the modified Guides.

Specifically, in the event the FTC issues another Federal Register notice soliciting comments on proposed modifications to the Guides, we believe such a notice should indicate that: (1) the FTC believes it is unfair or deceptive to mark or describe a product as "platinum" if it is not composed throughout of at least 500 parts per thousand pure platinum and at least 950 parts per thousand PGM; and (2) promotion of such products may be in violation of Section 5 of the Federal Trade Commission Act even prior to finalization of the modified Guides. Precedent for such a statement may be found in the FTC's reversal of its laser-drilling policy (where the FTC indicated in the Federal Register proposal that the Commission had tentatively concluded that laser drilling is an unfair or deceptive trade practice) and in the staff opinion letter recently issued on platinum/base metal alloys (where the FTC indicated that such alloys must be marketed consistent with Section 5 of the Federal Trade Commission Act).

2. The Proposed Standard Would Have a Positive Impact on Competition

Prohibiting lower purity platinum products from being marked or described as platinum will not stifle competition; products consisting of 500-850 ppt pure platinum and no PGMs may still compete in the marketplace with platinum and products composed of other precious metals – as long as they are not marketed as "platinum." In fact, a clear standard may actually increase competition by ensuring that industry is comfortable in engaging in transactions associated with such alloys. Any reluctance to engage in transactions due to ambiguity of the regulatory framework would be abated.

3. The Proposed Standard Would be Easy to Enforce

The proposed standard would be easy to enforce since the FTC and industry would not need to assess how products with varied properties and features are promoted and marked. The FTC would not need to evaluate consumer understanding of alloy markings, qualifying language used by companies to promote their specific alloys, in-store signage, and statements made by sales associates at the point of sale. Rather, the standard would be clear and unambiguous and consumers and industry would know how to interpret the Guides.

4. The Proposed Standard Would be Consistent With International Standards Prohibiting the Marking or Describing of Products Containing Between 500 and 850 parts per thousand Pure Platinum and No PGMs as Platinum

Not only would PGI's proposed standard be easy to enforce and have a positive impact on competition, but it would also be consistent with international and state standards that prohibit the marking or describing of products containing between 500 and 850 ppt pure platinum and no PGMs as platinum. Both the FTC and industry have recognized the importance of international consistency when developing platinum standards.[77] As discussed above, the ISO standard for platinum markings requires an 850 ppt pure platinum minimum.[78] As such, products containing between 500-850 ppt pure platinum and no other PGMs would be prohibited from being marketed as "platinum" under the ISO standard.

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[77] *See* 62 Fed. Reg. 16669.

[78] ISO 9202: 1991(E).

IV. Conclusion

To avoid widespread consumer fraud, confusion, and the inevitable chaos that would result from the platinum marketplace being inundated with multiple low-purity products containing differing and unforeseen properties, the FTC should amend the Guides to explicitly prohibit the use of the word "platinum" or any abbreviation thereof to mark or describe products not composed throughout of at least 500 parts per thousand pure platinum and at least 950 parts per thousand PGM.

Sincerely,

Hurw Daniel
President, Platinum Guild International U.S.A.

Attachment A

PLATINUM AWARENESS STUDY

An Empirical Analysis of Consumers' Perceptions Of Platinum as an Option in Engagement Ring Settings

By;
Thomas J. Maronick, DBA, JD

September, 2005

PLATINUM AWARENESS STUDY

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PLATINUM AWARENESS STUDY

Introduction

This consumer research was conducted to gain a better understanding of the importance of various factors in the selection of an engagement ring[1] by consumers who expect to be engaged in the next year. Specifically, there are five objectives:

a. to assess consumers' level of knowledge about different precious metals used in settings for engagement rings and the importance of selected properties of precious metals in the selection of an engagement ring setting,

b. to assess consumers' level of knowledge about the amount of precious metals in various types of metals used in engagement rings, including platinum, silver, yellow and white gold,

c. to assess consumer expectations regarding the amount of platinum and platinum group metals (PGM's) in an engagement ring promoted as "platinum[2]",

d. to determine what information about the properties of engagement rings promoted as "platinum" consumers would like to have and where they would expect to obtain such information,

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[1] In this study, platinum engagement rings were used as a proxy for all platinum jewelry because it is estimated that 30% of the retail dollar value of all platinum jewelry sold in the U.S. is accounted for by engagement rings. In addition, platinum wedding band sales are largely predicated on the purchase of platinum engagement rings, which gives the latter a disproportionate importance in the market as a whole.

[2] In this study, respondents were asked about an engagement ring with 40% base metals. This percentage was used as a proxy for lower purity "platinum" products. This percentage represents an example of a product at the higher end of base metal content in potential products promoted as "platinum."

e. to assess consumers' knowledge and understanding about specific claims related to the amount of platinum and platinum group metals in jewelry, including in engagement rings.

Methodology

Data for the study was collected from a sample of consumers who were members of the TNS-NFO (NFO) MySurvey Consumer Mail Panel. To be qualified for the study, the individual had to be:

a. Age 21- 34,

b. Have a personal annual income of at least $30,000 per year,

c. Have had at least some college,

d. Not be married or engaged at the time of the survey but expect to be engaged in the next twelve months, and

e. Expect to have at least some role in the selection of the engagement ring.

Approximately half of the sample was to be male and half female.

The total sample size was 332. The study was pre-tested in May, 2005 with a sample of thirty. The final study was executed with a sample of three hundred (300) qualified respondents in June, 2005. Because there were no changes to the questionnaire [See Appendix A] or selection criteria following the pretest, the pretest results were included in the final study tabulations, resulting in a total sample size of 332.

Target Market

An important consideration in this study was to assure that the respondents are in the target market for an engagement ring. Thus, respondents were those who expect to be engaged in the next year and who expect to play at least some role in the selection of

the ring setting. The resulting data show that the respondents are clearly in the target market for a platinum engagement ring. As noted in the Findings below (Table 2), 81.9% of respondents are either "very knowledgeable," "fairly knowledgeable," or "know something" about platinum. This compares favorably with knowledge about silver (86.1%), white gold (84.6%), and yellow gold (85.8%). Moreover, when asked how likely they were to consider specified precious metals for an engagement ring, 85% of respondents indicated they would "definitely," "most likely," or "probably" consider platinum. This compares favorably with likelihood percentages for each of the other three precious metals: silver (79%), yellow gold (43%), and white gold (34.9%).

Given these findings, the respondents are clearly in the target market for platinum when they select or play a role in selecting an engagement ring in the next year.

SUMMARY OF FINDINGS

Four major findings flow from this study of consumers who expect to be engaged in the next year and expect to play at least some role in the selection of the engagement ring.

1. **Consumers expect a "platinum" product to contain a substantial percentage of "pure platinum"**

   - The data show that the majority of consumers expect a "platinum" product to contain a substantial proportion (80% or more) "pure platinum" (Table 3)
   - Over one-third of respondents (35.5%) indicated they would not expect an engagement ring to be called "platinum" if it had 40% base metals, with an additional 41.3% either "not sure" or at least equivocal (i.e., "maybe") (Table 6).
   - A substantial percentage of respondents (28.6%) do not expect a product to be called "platinum" if it contains 40% base metals, even if it is assumed to have all the properties of "pure" platinum (Table 8). Moreover, an additional 38.2% were either "not sure" or equivocal (i.e., "maybe") as to whether such a product should be called "platinum."
   - A majority of consumers (58.4%) would not expect an engagement ring to be called "platinum" if it did not have all the properties of "pure platinum," e.g., durability, scratch and tarnish resistance, security of the stone, and look over time. Moreover, an additional 26.5% were either "not sure" or equivocal (i.e., "maybe") as to whether such a product should be called "platinum" (Table 110).
   - A significant percentage of consumers (34.6%) would "definitely" or "probably" not expect an engagement ring to be called "platinum" even if they were informed of its metal content and properties prior to purchase (Table 7).

2. **Mere metal content disclosures (e.g., percent platinum, platinum group metals, and base metals) are not sufficient – consumers expect to be informed about specific properties of engagement rings containing significant amounts of base metals.**

   - Factors important to the vast majority of consumers in the selection of an engagement ring include: durability, scratch and tarnish resistance, security of the stone, type and purity of the precious metal, and the look of the setting over time (Table 1).
   - Most of the same factors are also important to know prior to purchase if the engagement ring being offered has 40% base metals (Table 13).

3. **Consumers have identified three primary sources of information they would look to for information regarding the content and properties of engagement rings.**

   - Consumers look to three primary sources for information about content and properties of engagement rings: sales representatives, tags on engagement ring settings, and information stamped inside the ring (Table 5).
   - A substantial percentage of consumers expect to learn about the precious metal content and properties of engagement rings from more than one source.

4. **Most consumers do not have a clear understanding of what "14kt" means and the vast majority (i.e., nine out of ten) do not understand what either ".585 plat, 0 pgm" or ".585 plat, .415 CO/CU" means.**

- While 82.2% of respondents said they understood what "14kt" meant, only 16.1% of them accurately indicated its meaning (i.e., 58-59% of the metal), while 30.4% said "14kt" means 14% precious metal (Table 14).
- When asked if they understood what ".585 plat, 0 pgm" meant, only two respondents out of 332, i.e., less than 1% of the total sample, correctly indicated that it means the product had 58.5% pure platinum and 0% platinum group metals.
- When asked if they understood what ".585 plat, .415 CO/CU" meant, less than 7% of the total sample correctly indicated that the phrase gives the proportion of platinum in the alloy (58.5%) and the proportion of copper and cobalt (41.5%).

MAJOR FINDINGS

Factors Important to Consumers in Purchasing Engagement Ring Settings.

Respondents were shown a list of fifteen factors that may or may not be important in their decision for an engagement ring. They were asked (Q6) to rate each of the factors in terms of importance to them in the decision on a setting for an engagement ring. Included in the list were such factors as: durability, scratch resistance, price, look of the setting on finger and over time, the type of precious metal (i.e., platinum, white/yellow gold, silver), and the purity of the precious metal in the setting. As noted in Table 1, three-fourths of all respondents (77.7%) indicated that the purity of the precious metal in the setting was "very important," or "important," in their decision on a setting for an engagement ring. Moreover, if those who said it was "somewhat important" are included, then the percentage increases to 93.1% of all respondents who consider the purity of the precious metal to be at least somewhat important in their decision on a setting for an engagement ring.

It is also noteworthy that over 90% of respondents considered durability, quality of the setting, and security of the stone as "very important" or "important" in their decision on the setting for an engagement ring, with 84% or more also indicating that scratch resistance and look of the setting over time as "very important" or "important." Furthermore, there are few differences in levels of importance for any of the factors between respondents who are very likely to consider platinum for their engagement ring (i.e., "definitely" or "most likely") and those who might or might not consider platinum.

Table 1
Factors Important to Consumers in Purchasing Engagement Ring Settings
(n = 332)

	Very Important	Important	Very/ Important (NET)[3]	Definitely/Most Likely Consider Platinum (NET)[4]	Might or Might Not Consider Platinum[5]
Durability	59.3%	30.7%	90.1%	91.0%	89.4%
Scratch Resistance	49.7%	38.6%	88.3%	90.0%	85.9%
Tarnish Resistance	54.8%	30.1%	84.9%	85.1%	85.9%
Security Stone	78.9%	16.6%	95.5%	95.9%	96.5%
Price	44.0%	27.1%	71.1%	73.8%	68.2%
Jeweler Reputation	27.7%	39.2%	66.9%	68.3%	68.2%
Brand of Setting	14.8%	19.9%	34.6%	35.7%	32.9%
Hypoallergenic Properties	17.5%	16.3%	33.7%	34.4%	34.1%
Look on Finger	64.5%	26.5%	91.0%	93.7%	88.2%
Look over Time	50.9%	33.4%	84.3%	85.5%	85.1%
Quality of Setting	67.8%	22.9%	90.7%	91.9%	90.6%
Type Precious Metal	54.5%	32.5%	87.0%	88.7%	85.9%
Purity of Precious Metal	43.7%	34.0%	77.7%	80.1%	74.1%
Weight of Setting	22.6%	31.3%	53.9%	58.4%	42.4%
Ability have Adjusted	34.3%	37.7%	72.0%	73.3%	69.4%

Clearly, these factors, including the purity of the precious metal in the setting of an engagement ring, are important factors in the respondents' selection process.

[3] Percent of Respondents indicating "Very Important" or "Important" in their purchase decision (i.e., NET).

[4] Percent of Respondents indicating "Definitely" or "Most Likely" to Consider Platinum (i.e., NET).

[5] "Might or Might Not Consider Platinum" includes the response categories "It's one I'd probably consider" and "It's one I probably wouldn't consider but I might." (Q13)

Consumer Knowledge Regarding Precious Metals Used in Settings for Engagement Rings (Q7). As noted in Table 2, over half of the respondents (54.2%) consider themselves to be "very knowledgeable" or "fairly knowledgeable" about platinum, with an additional 27.7% considering themselves to "know something about it." Thus, 81.9% know at least "something" about platinum as a precious metal used in engagement rings.

Table 2
Level of Knowledge About Precious Metals (Q7)

	Platinum N = 332	Silver N = 332	White Gold N = 332	Yellow Gold N = 332
Very Knowledgeable	18.7%	21.4%	20.5%	23.5%
Fairly Knowledgeable	35.5%	37.3%	35.8%	36.4%
Know Something About	27.7%	27.4%	28.3%	25.9%
Some Knowledge (NET)	81.9%	86.1%	84.6%	85.8%
Don't know Much About	14.8%	11.4%	12.0%	11.1%
Don't Know Anything About	3.3%	2.4%	3.3%	3.0%

Moreover, the percentage of respondents knowing "something" about platinum is not significantly different from the percentage knowing "something" about the other precious metals, indicating a high level of knowledge about all the precious metal options among those in the sample.

Consumer Expectations Regarding the Amount of Platinum in a "Platinum" Engagement Ring (Q14). Respondents who indicated they at least "might consider" platinum for their engagement ring (i.e., "definitely would" ... "I wouldn't consider but I might") were asked, *"Assuming you were considering a platinum engagement ring, how much platinum would you expect in a "platinum" engagement ring?*

Table 3
Amount of Platinum Expected in "Platinum" Engagement Ring (Q14)

	Total N=306	Definitely/Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=135	Purity of Precious Metal Very/Somewhat Important N=240
All or Almost All Platinum	24.8%	28.5%	15.3%	34.1%	28.3%
90% or More Platinum	14.7%	15.5%	12.9%	17.0%	15.4%
90% or More (NET)	39.5%	43.9%	28.2%	51.1%	43.8%
80% or More Platinum	10.8%	11.8%	8.2%	12.6%	10.4%
80% or More (NET)	50.3%	55.7%	36.5%	63.7%	54.2%
75% or More Platinum	14.7%	13.6%	17.6%	10.4%	14.6%
66.6% or More Platinum	3.9%	4.1%	3.5%	3.0%	3.3%
66.6% or More (NET)	68.9%	73.4%	57.6%	77.1%	72.1%
50% or Less (NET)	8.5%	6.8%	12.9%	5.2%	6.7%
Doesn't matter how much platinum	2.6%	2.3%	3.5%	3.0%	2/5%
Don't Know/ Not Sure	19.9%	17.6%	25.9%	14.7%	18.8%

As noted in Table 3, almost forty percent of respondents, (39.5%) expect a ring called "platinum" to contain at least 90% platinum and over half of all respondents (50.3%) expect a ring called "platinum" to contain at least 80% platinum. Also, almost seven out of ten respondents (68.9%) expect that a ring called "platinum" would contain at least two-thirds, i.e., 66.6% platinum. Moreover, as noted in Table 3, the percentages are slightly higher across all three percentage levels (i.e., 90%, 80%, and 66.6% platinum) for those who are clearly in the target market for a platinum engagement ring, i.e., would "definitely" consider platinum. Furthermore, as noted in Table 3, among respondents who said that the purity of the precious metal was "very important" in their purchase decision, the net percentage who expected significant amounts of platinum in an engagement ring called "platinum," were even higher across all three percentage levels, i.e., 90%, 80%, and 66.6% platinum.

Importance of Knowing the Percentage of the Precious Metal in an Engagement Ring. Respondents were asked, *How important is it to you to know the percentage of the precious metal in an engagement ring setting before you buy it* (Q16). As noted in Table 4, nearly two-thirds of respondents (63.9%) indicated that it was "very important" or "important" to know the percentage before purchase. Moreover, 82.3% of respondents indicated that it is at least "somewhat important" information to know prior to purchase. Furthermore, among respondents for whom knowing the purity of the precious metal is "very important," three out of four (77.2%) considered it "very important" or "important" to know the percent of the precious metal prior to purchase of an engagement ring. Also, as noted in Table 4, the percentage increases to 90.3% of respondents for whom the purity of the precious metal is important if those who consider it "somewhat important"

to know the purity of the precious metal in an engagement ring prior to purchase are included.

Table 4
Importance of Knowing Percent of Precious Metals
in an Engagement Ring (Q16)

	Total N= 332	Definitely/Most Likely Consider Platinum N= 221	Might or Might Not Consider Platinum N = 85	Purity of Precious Metal Very Important N = 145	Purity of Precious Metal Very/ Important N = 258
Very Important	33.1%	33.9%	30.6%	45.5%	36.0%
Important	30.7%	29.4%	40.0%	31.7%	34.5%
Very/Important (NET)	63.9%	63.3%	70.6%	77.2%	70.5%
Somewhat Important	18.4%	21.7%	11.8%	13.1%	17.1%
Very/Important/ Somewhat Impt (NET)	82.3%	85.0%	82.4%	90.3%	87.6%
Somewhat Unimportant/Not at all Important	12.9%	11.8%	13.0%	5.6%	8.5%
Don't know/Not Sure	4.8%	3.2%	4.7%	4.1%	3.9%

Consumers' Expectations Regarding How to Learn About Percentage of Base Metal in a "Platinum" Engagement Ring (Q17). Respondents were asked how they would expect to learn about the purity of the precious metal, i.e., the amount of base metal in an engagement ring, prior to purchase. As noted in Table 5, most respondents (81.6%) expected to be told by the jewelry salesperson, followed by a tag on the ring setting (36.5%) and/or see the information stamped on the inside of the ring (36.1%). Clearly, respondents look to three primary sources for information on the purity of the precious metal in engagement rings: salespersons, a tag on a ring setting, and the

information stamped on the limited space inside of the ring. It is noteworthy that, while consumers would look to the sales representative, the inside of the ring, or a tag on the ring setting for information regarding the purity of the precious metal in an engagement ring, a substantial percentage of them would look to more than one source for such information.

Table 5
Way Respondents Expect to Learn About the Percentage of Base Metals in an Engagement Ring (Q17)

	Total N = 299	Definitely/Most Likely Consider Platinum N=201	Might or Might Not Consider Platinum N = 80
Advertising	10.3%	9.5%	10.0%
Newspaper or Magazine Article	6.0%	7.0%	3.8%
Tag on Ring Setting	36.5%	40.8%	30.0%
Jewelry Store Sign	13.4%	13.9%	12.5%
Sign on Jewelry Counter	13.7%	14.4%	10.0%
Told by Jewelry Salesperson	81.6%	83.1%	80.0%
Sales Receipt	8.7%	8.0%	8.8%
Stamped on Inside of Ring	36.1%	35.8%	37.5%
Other[6]	9.7%	11.4%	5.0%

Consumer Expectations Regarding Engagement Rings Called "Platinum" with 40% Base Metals[7]. Respondents were asked, *Assume you are in the market for a platinum engagement ring, would you expect the engagement ring to be called "platinum" if it has 40% or more base metals?* (Q18). As indicated in Table 6, less than one-fourth of the respondents (22.9%) expect that an engagement ring with 40% or more base metals "definitely" or "probably" would be called "platinum." On the other hand,

[6] "Other" responses included "appraisals" (n=6), "ask a friend" (n=3), "internet search" (n=11), and "research" (n=6) (Appendix C-3)
[7] As noted above (Footnote #1), 40% base metal was used as a proxy for lower purity "platinum" products.

35.5% responded that it "probably" or "definitely" would not be called "platinum" if it had 40% or more base metals, while 12.7% were not sure. It is also noteworthy in Table 6 that the percent of respondents who would not expect an engagement ring with 40% base metals to be called "platinum" is slightly higher among those most likely to consider platinum and among those for whom the purity of the precious metal is "very important."

Table 6
Expectations About an: Engagement Ring Being Called "Platinum"
with 40% Base Metals (Q18)

	Total N=332	Definitely/ Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=145	Purity of Precious Metal Very/Important N=258
Definitely Yes	1.2%	0.9%	2.4%	1.4%	0.8%
Probably Yes	21.7%	22.2%	23.5%	17.9%	18.2%
Maybe	28.6%	28.5%	29.4%	27.6%	29.1%
Probably Not	26.8%	28.1%	21.2%	31.7%	27.2%
Definitely Not	8.7%	9.5%	8.2%	9.7%	9.4%
Definitely/Probably Not (NET)	35.5%	37.6%	29.4%	41.4%	36.6%
Don't Know/Not sure	12.7%	10.9%	15.3%	11.7%	13.6%

Consumer Expectations Regarding Engagement Rings Being Called "Platinum" if Informed Prior to Purchase That the Engagement Ring Contained 40% or More of Base Metals. Respondents were then asked whether, *if you were informed prior to purchase that an engagement ring had 40% or more base metals, would you expect the engagement ring to be called "platinum?"* (Q19). As noted in Table 7, a slightly higher percentage of respondents indicated that they expected an engagement ring might be called "platinum" (i.e., "definitely" or "probably" would be called platinum) if the respondents were informed prior to purchase that it contained 40% or more base metals compared to those who were not informed (28.0% v. 22.9%). However, as noted in

Table 7, over a third of all respondents (35%) still indicated that they "definitely" or "probably" would not expect an engagement ring to be called platinum if it had 40% or more base metals, even if they were informed of that fact prior to purchase.

Table 7

Expectations About an: Engagement Ring Being Called "Platinum" If Informed It Had 40% Base Metals (Q19)

	Total N=332	Definitely/ Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=145	Purity of Precious Metal Very/Important N=258
Definitely Yes	1.8%	1.4%	3.5%	1.8%	0.7%
Probably Yes	26.2%	27.7%	25.5%	24.8%	25.2%
Maybe	27.1%	28.1%	28.1%	28.3%	27.9%
Probably Not	25.3%	24.9%	24.9%	26.9%	26.7%
Definitely Not	9.3%	10.9%	10.9%	8.9%	10.3%
Definitely/Probably Not (NET)	34.6%	35.8%	35.8%	35.8%	37.0%
Don't Know/Not sure	9.3%	7.7%	15.3%	8.3%	8.9%

Consumer Expectations Regarding Engagement Rings Being Called "Platinum" if Informed that the Engagement Ring Contained 40% or More of Base Metals But Has All the Properties of Platinum (Q20). Respondents were asked, *Assume you are in the market for a platinum engagement ring and assume that the engagement ring has all the properties of a "pure" platinum engagement ring but has 40% or more base metals, would you expect such a ring to be called "platinum?"* As noted in Table 8, this third "iteration" in assessing consumers' expectations regarding calling an engagement ring "platinum" yields slightly higher percentages of respondents who expect such a ring might be called platinum compared to those asked the prior two questions. However, almost 29% of respondents would "definitely" or "probably" not expect consider a ring

with 40% base metals to be called "platinum" even in the assumed situation where the ring has the same properties as a "pure" platinum ring.

Table 8
Expectations re: Engagement Ring Being Called "Platinum" If Had 40% Base Metals But All Properties of "Pure" Platinum (Q20)

	Total N=332	Definitely/ Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=145	Purity of Precious Metal Very/Important N=258
Definitely Yes	3.9%	3.6%	4.7%	3.4%	3.9%
Probably Yes	28.0%	27.6%	34.1%	29.0%	27.5%
Maybe	28.9%	32.6%	18.8%	29.7%	30.2%
Probably Not	21.1%	19.5%	23.5%	22.1%	20.5%
Definitely Not	7.5%	8.1%	7.1%	6.9%	7.4%
Definitely/Probably Not (NET)	28.6%	27.6%	30.6%	29.0%	27.9%
Don't Know/Not sure	9.3%	8.1%	10.6%	7.6%	9.3%

When asked how important it was to know the properties of such an engagement ring (i.e., 40% or more base metals but with all the properties of "pure" platinum), over two-thirds of all respondents (68.6%) indicated that it was "very important" or "important" to know that information (Table 9).

Table 9
Importance of Knowing About Properties of Engagement Ring with 40% Base Metals and With All Properties of "Pure" Platinum (Q21)

	Total N= 332	Definitely/Most Likely Consider Platinum N = 221	Might or Might Not Consider Platinum N = 85	Purity of Precious Metal Very Important N = 145	Purity of Precious Metal Very/ Important N = 258
Very Important	40.3%	42.1%	40.0%	52.4%	44.2%
Important	28.3%	27.1%	34.1%	26.2%	29.8%
Very/Important (NET)	68.6%	69.2%	74.1%	78.6%	74.0%
Somewhat	19.6%	19.0%	20.0%	14.5%	17.4%

Important					
Very/Important/ Somewhat Impt (NET)	88.0%	88.2%	94.1%	93.1%	91.5%
Somewhat Unimportant/Not at all Important	7.8%	8.2%	4.7%	4.2%	5.9%
Don't know/Nor Sure	4.2%	3.6%	1.2%	2.8%	2.7%

Also, when asked how they would expect to learn about the properties of such an engagement ring, similar to the percentages for where respondents expect to learn about the amount of base metals in an engagement ring, as noted in Table 10, the vast majority or respondents expect to obtain information about the properties of an engagement ring with 40% or more base metals from three primary sources: the salesperson, a tag on the ring setting, and having all the information stamped on the inside of the ring.[8]

[8] See discussion below (pg. 26) regarding consumers' understanding of information generally used to describe amount of pure metals such as gold (e.g. 14kt), or platinum in jewelry, e.g., .585 plat, 0 pgm.

Table 10
Way Respondents Expect to Learn About Properties of Engagement Ring with 40% Base Metals and Properties of "Pure Platinum" (Q22)

	Total N = 308	Definitely/Most Likely Consider Platinum N = 206	Might or Might Not Consider Platinum N = 83
Advertising	12.7%[9]	11.7%	15.7%
Newspaper or Magazine Article	12.7%	12.1%	15.7%
Tag on Ring Setting	38.0%	40.3%	34.9%
Sign in Jewelry Store	17.9%	17.0%	20.5%
Sign on Jewelry Counter	23.4%	24.3%	19.3%
Told by Jewelry Salesperson	83.8%	85.9%	81.9%
Sales Receipt	9.1%	7.8%	10.8%
Stamped on Inside of Ring	34.4%	35.9%	32.5%
Other[10]	11.7%	12.6%	7.2%

Consumer Expectations Regarding Being Called "Platinum" if Informed that an Engagement Ring Contained 40% or More of Base Metals But Without All the Properties of Platinum (Q23a). Respondents were asked *Assume you are in the market for a platinum engagement ring and assume that the engagement ring does not have all the properties of a "pure" platinum engagement ring and has 40% or more base metals, would you expect such a ring to be called "platinum?"* As noted in Table 11, the

[9] Multiple responses accepted
[10] "Other" responses included "appraisals" (n=5), "ask friend/expert" (n=4), "internet research" (n=13), "library/research" (n=10). [Appendix C-4]

majority of respondents in the target market (58.4%) "probably," or "definitely would not" expect such an engagement ring to be called "platinum."

Table 11
Expectations re: Engagement Ring to be Called "Platinum" If Has 40% Base Metals But Does Not Have All Properties of "Pure" Platinum (Q23a)

	Total N=332	Definitely/ Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=145	Purity of Precious Metal Very/Important N=258
Definitely Yes	0.6%	0%	2.4%	0%	0.4%
Probably Yes	13.6%	13.6%	16.5%	15.9%	12.4%
Maybe	17.5%	18.6%	12.9%	15.2%	18.2%
Probably Not	30.1%	31.2%	29.4%	32.4%	29.1%
Definitely Not	28.3%	29.0%	27.1%	29.7%	31.0%
Definitely/Probably Not (NET)	58.4%	60.2%	56.5%	62.1%	60.1%
Don't Know	9.0%	6.8%	11.8%	5.5%	8.1%

Furthermore, among respondents "definitely" or "most likely" to consider platinum for an engagement ring and those for whom the purity of the precious metal is "important," over 60% indicated they "definitely" or "probably" would not expect a ring to be called "platinum" if it contained 40% or more base metals but did not have all the properties of 'pure" platinum.

Moreover, as noted in Table 12, when asked how important it would be to know the properties of a ring that had 40% base metals but not all the properties of a "pure" platinum engagement ring, over two-thirds (69.3%) indicated that it was "very important" or "important" to know the properties of the engagement ring before purchase. Also, if the third response category, "somewhat important," is added, then 88.0% of respondents think it at least "somewhat important" to know the properties of the engagement ring that does not have all the properties of "pure" platinum prior to purchase.

Table 12
Importance of Knowing About Properties of Engagement Ring with 40% Base Metals But Without All Properties of "Pure" Platinum (Q23b)

	Total N= 332	Definitely/Most Likely Consider Platinum N = 221	Might or Might Not Consider Platinum N = 85	Purity of Precious Metal Very Important N = 145	Purity of Precious Metal Very/ Important N = 258
Very Important	41.9%	42.5%	45.9%	54.5%	46.5%
Important	27.4%	29.4%	27.1%	24.8%	28.3%
Very/Important (NET)	69.3%	71.9%	72.9%	79.3%	74.8%
Somewhat Important	18.7%	17.6%	17.6%	12.4%	16.3%
Very/Important/ Somewhat Impt (NET)	88.0%	89.6%	90.6%	91.7%	91.1%
Somewhat Unimportant/Not at all Important	7.5%	7.3%	4.7%	5.5%	5.1%
Don't know/Nor Sure	4.5%	3.2%	4.7%	2.8%	3.9%

As was the case when respondents were asked where they would expect to learn about the amount of base metals in an engagement ring [See Table 5], respondents also expect to be informed about the properties of the engagement ring with 40% or more base metals that does not have all the properties of "pure" platinum by the salesperson, a tag on the ring setting, and seeing the information stamped on the inside of the ring.

Information Consumers Would Like to Know About the Properties of Engagement Rings with 40% Base Metals Prior to Purchase (Q25). Respondents were shown a list of properties and asked *which, if any, they would like information about prior to purchase of an engagement ring with 40% base metals*. Table 13 shows the

properties of an engagement ring consumers said they "definitely" or "possibly" would want to know about an engagement ring with 40% base metals before purchase.

Table 13
Information Respondents Would Want to Know Prior to Purchase
of an Engagement Ring with 40% Base Metals (Q25)
(Net Values: Definitely – Possibly Would Like to Know)

	Total N=332	Definitely/ Most Likely Consider Platinum N=221	Might or Might Not Consider Platinum N=85	Purity of Precious Metal Very Important N=145	Purity of Precious Metal Very/Important N=258
Durability	93.0%	93.8%	90.5%	95.7%	94.4%
Scratch Resistance	89.8%	92.4%	85.7%	95.0%	93.3%
Tarnish Resistance	90.5%	92.4%	86.9%	95.0%	92.3%
Security of Stone in Setting	90.5%	93.3%	85.7%	96.4%	93.5%
Look of Setting Over Time	87.9%	91.4%	83.3%	93.5	91.1%
Hypoallergenic Properties	64.4%	67.1%	61.9%	75.5%	68.1%
Ability of Jeweler to Resize	82.2%	82.9%	82.1%	91.4%	87.1%
Weight of Setting	76.2%	77.6%	72.6%	85.6%	79.4%
Other[11]	34.3%	35.7%	33.3%	43.2%	36.3%

It is noteworthy that consistently higher percentages of respondents for whom the purity of the precious metal is "very important" indicated they would like to have information about each one of the factors identified, with over 90% of respondents indicating they

[11] Other responses included: cost comparison (n=21), warranty/guarantee (n=9), metal composition (n=7), where it came from (n=4), insurance information (n=3), longevity (n=2), impurities/imperfections (n=1). 24 respondents did not specify any other information [See Attachment C]

would like information about durability, tarnish resistance, security of the stone, and the look of the setting over time before purchase.

Consumers' Understanding of the Term "14kt" and "18kt." Respondents were asked whether they understood what the term "14kt" that is used to describe gold jewelry meant (Q8). 82.2% of respondents (n = 273) indicated that they did know what it meant. However, when asked "*How much of the precious metal does an engagement ring or other jewelry contain if it says "14kt"(Q10), as noted in Table 14,* 34.1% said under 15%, with most (30%) saying "14kt" means 14% precious metal. Also, only 16.1% of respondents who said they knew what "14kt" means accurately indicated that it means it contains 58-59% of the precious metal. On the other hand, 16.7% of the respondents indicated that an engagement ring or other jewelry labeled "14kt" contains 75% or more of the precious metal.

Table 14
Perception of Percent of Precious Metal in "14kt" Jewelry (Q10)

Percentages	N = 273
0 – 10%	3.7%
14%	30.4%
15-20%	1.5%
50-55%	12.0%
58-59%	16.1%
60-74%	12.1%%
75%-100%	16.7%

Similarly, when asked whether there is a difference between "14kt" and "18kt," 86.8% said there was. However, when asked how much of the precious metal does jewelry that says "18kt" contain, as noted in Table 15, over a third of respondents (34.9%) indicated less than 20%, including 30.8% who said that "18kt" means 18%

precious metal. On the other hand, 32.9% correctly said "18kt" gold contains 75% precious metal, while 16.3% said it contains more than 75% precious metal

Table 15
Perception of Percent of Precious Metal in "18kt" Jewelry (Q12)

Percentages	N = 237
0 – 16%	4.1%
18%	30.8%
20 – 50%	7.1%
51 – 74%	6.2%
75%	32.9%
76%-100%	16.3%

Clearly, for both 14kt and 18kt, the vast majority of consumers do not know what the familiar measures of gold purity actually mean.

Consumers' Understanding of ".585 plat, 0 pgm" (Q31). Respondents were asked whether they knew what the phrase ".585 plat, 0 pgm" means[12]. Only seventeen of the 332 respondents (5.2%) indicated they knew what the phrase meant. When asked what it meant, however, only two of the seventeen, i.e., less than one percent of the total sample, gave a completely correct response, i.e., the exact proportion of platinum in the alloy and specified that the balance is base metal or other not platinum metal. Eleven of the remaining respondents correctly indicated that ".585 plat" referred to the proportion of platinum in the alloy but did not mention or understand what "0 pgm" meant. The remaining four respondents gave other, partially correct, answers. Thus, only 5.1% of the total sample had even a partially correct understanding of what ".585 plat, 0 pgm" meant.

[12] .585 Plat, 0 pgm describes the amount of platinum and platinum group metals in a piece of jewelry, i.e., 58.5% Platinum, 0% platinum group metals.

Consumers' Understanding of ".585 plat, .415 CO/CU" (Q33). Respondents were also asked whether they knew what the phrase ".585 plat, .415 CO/CU" meant.[13] Only twenty-five of the 332 respondents (7.5%) indicated that they knew what the phrase meant while 85% did not know and 7.4% were not sure. Among those who said they knew what .585 plat, .415 CO/CU meant, 23 (6.9% of the total sample) correctly indicated that the phrase gives the proportion of platinum in the alloy (58.5%) and the proportion of copper and cobalt (41.5%).

Consumers' Expectations about Standards for "Platinum" in the US and Other Countries. Respondents were asked (Q15) whether *they would expect the standard for a ring to be called "platinum" to be the same in the United States as in other countries around the world?* Almost two-thirds of all respondents (64.7%) indicated that they would expect the standards for calling an engagement ring "platinum" would be the same in the United States as in other countries, with an additional 20.6% saying they didn't know or were not sure. Also, there were no differences in expectations that the standards would be the same among those who are "most likely" to consider a platinum ring (66.1%) or among those for whom the purity of the precious metal was "very important" (65.2%).

Demographics

The respondents in the study are clearly in the target market for platinum jewelry since the screening criteria included consumers likely to be engaged in the next year and who expect to play a role in the selection of the engagement ring setting. The findings also demonstrate that the respondents are in the target market for a platinum engagement

[13] .585 plat, .415 CO/CU indicates that the piece of jewelry has 58.5% Platinum and 41.5% copper (CO) or cobalt (CU).

ring since 81.9% said they were "very," "fairly knowledgeable," or "knew something" about platinum (Q7) and 85% indicated they "definitely," "most likely," or "probably" would consider platinum (Q13). The respondents in the study also reflect a broad cross-section of consumers, with all geographic regions approximately represented: northeast 21.7%; midwest 24.4%, south 35.2%, and west 18.7%. Also, the respondents reflect wide diversity in household income levels, with 23.8% having under $40,000[14], 29% between $40,000 and $60,000, 26.8% between $60,000 and $90,000, and 20.2% having a household income of over $90,000. Finally, all respondents expect to get engaged in the next twelve months and all expect to play a role in the selection of the setting for the engagement ring (Q5a). It is noteworthy that 63% of the male respondents expected to have "sole responsibility" in the selection of the setting for the engagement ring, while 96.4% of the female respondents expected to "share the responsibility" with their fiancée.

[14] The screening criteria was personal income of at least $30,000.

CONCLUSIONS

There are four significant findings that flow from this study of consumers who expect to be engaged in the next year. Each of these findings has significant implications for marketing of engagement ring settings promoted as "platinum" if they contain less than expected amounts of "pure" platinum and particularly if the product does not contain all the properties of "pure" platinum and/or such properties are not disclosed.

First, the data show that the majority of consumers expect a "platinum" engagement ring to be 80% or more "pure platinum." Over one-third of respondents (35%) also indicated that they would not expect an engagement ring to be called "platinum" if it had 40% base metals, with an additional 36% either not sure or at least equivocal (i.e., "maybe"). Moreover, if the engagement ring had 40% base metals and did not have all the properties of "pure platinum," the majority of respondents indicated it "definitely" or "probably" should not be called "platinum."

This suggests that any attempt to promote a product as "platinum" that does not contain a substantially high percentage of pure platinum is likely to deceive consumers, particularly if the product does not contain all the properties of "pure platinum" and/or such properties are not disclosed.

Second, durability, scratch and tarnish resistance, security of the stone, type and purity of the precious metal, and the look of the setting over time are important to all consumers in the selection of any engagement ring. Importantly, consumers would want to know about these factors prior to purchase if the product being offered has 40% base metals . This raises questions about whether it is possible and how to adequately inform

consumers regarding the content and properties of products promoted as "platinum" but containing substantial percentages of base metals.

Third, the data show that consumers expect to obtain information regarding engagement ring properties from three primary sources: the salesperson, a tag on the ring, and stamped on the inside of the ring, with a substantial percentage looking to multiple sources for information. While it may be possible to stamp the percentage of the precious metal (i.e., level of purity) on the inside of the ring setting, although few consumers are likely to know what it means (see below), it is clearly impossible to provide the other information deemed important (durability, scratch and tarnish resistance, look over time) on the inside of the ring and questionable whether it is possible to provide this information in a meaningful and non-deceptive manner in a small tag attached to the ring. In fact, based on the results of this study of 332 consumers who are clearly in the target market for platinum engagement rings, it is highly doubtful that the level and depth of information consumers consider important prior to purchase can be provided in any meaningful way for a product promoted as "platinum" but containing significantly less "platinum" than the platinum jewelry currently being sold in the U.S. market. It is also questionable how effective a program would be that relies on sales representatives to provide the information consumers desire.

Fourth, the data show that less than 1% of the total sample understand the meaning of ".585 plat, .0 pgm" and only a slightly higher percentage understand the meaning of ".585 plat, .415 CO/CU." What makes these data so remarkable is that these questions were asked after an explanation of the fact that engagement rings have "different percentages of a precious metal in their setting ... and the remaining percentage

are base metals" (Q16) and after series of questions that discussed "platinum" with 40% base metals and consumers' expectations. This raises a question. If virtually no consumers understand what either ".585 plat, 0 pgm" or ".585 plat .415 CO/CU" means after extensive sensitizing questions, how likely is it that the ultimate consumer will understand the phrase when considering purchase of an engagement ring absent extensive education by the seller? Moreover, given that most consumers don't really understand what the familiar term for purity of gold (i.e., "14kt") means, and given consumers' expectations for information about properties of engagement rings containing 40% or more base metals, the need for the non-deceptive information is magnified by the lack of understanding of what ".585 plat" means.

STUDY LIMITATIONS

This study has not assessed the ability and/or desire of salespersons to relay complex disclosures about products with higher base metal content than traditional platinum jewelry at the point of sale. This study has also not assessed whether consumers would comprehend such disclosures, or whether such disclosures would be meaningful to consumers when attempting to compare jewelry products with higher base metal content with traditional platinum jewelry sold in the United States.

Submitted by: _____ _____
Thomas J. Maronick Sept. 26, 2005

APPENDIX A
05/16/05
PLATINUM QUESTIONNAIRE

ASK ALL
1. Please indicate your gender. (Select One)
Male
Female

Evaluate Quotas:
Group 12=Females
Group 22=Males

ASK ALL
2. Please indicate your age. <Type in><min=16><max=99>

ASK ALL
3a. What is your current marital status? (Select one)
Married
Never Married
Divorced
Widowed/Separated

ASK ALL
3b. What is your annual household income before taxes? (Select one)

Under $20,000
$20,000-$24,999
$25,000-$29,999
$30,000-$39,999
$40,000-$59,999
$60,000-$79,999
$80,000-$99,999
$100,000-124,999
$125,000-$149,999
$150,000+
Prefer not to answer

ASK ALL
3c. Please indicate the highest level of school that you completed? **(Select One)**

Grade school or less
Some high school
Graduated high school
Some college
Completed college
Post graduate education or other graduate school
Other education beyond high school (business school, secretarial school, nursing school, etc.)

ASK ALL
4. Please indicate if you are...(Select One)
Engaged to be married
Not engaged to be married, but plan to be in the next 12 months
No plans to get engaged to be married

Term if Q.2 is <21 or >34 (Must be 21-34 to continue)
TERM IF Q3=1 (MUST BE NEVER MARRIED/DIVORCED OR WIDOWED/SEPERATED TO CONTINUE)
TERM IF 3b=1-3 (MUST BE $30,000+ to continue)
TERM IF 3c=1-3-Graduated High School or less (Must have some college or more)
TERM IF Q4=1 TERM IF Q4=1 OR 3 (MUST BE: Not engaged to be married, but plan to be in the next 12 months)

ASK ALL
5a. What type of role will you play in selecting the engagement ring? (Select One)
I will have sole responsibility
I will share the responsibility with my fiancée/fiancé
My financée/fiancé will have sole responsibility

TERM IF Q5a=3 (FIANCEE/FIANCÉ WILL HAVE SOLE RESPONSIBILITY)
(As the survey is to both genders don't we have to make this gender neutral?)

ASK 5C IF IN GROUPS 12/22
5C. Based on your answers to the previous questions, you qualify for a survey about jewelry. This survey should take about XX minutes of your time. For your help, you'll earn an additional XX NFO MySurvey.com reward points. A total of XXX **NFO MySurvey.com reward points** will be credited to your account upon completion of the survey. Would you like to continue with this survey?

Yes
No

TERM IF 5C=2 (NO)

ASK GROUPS 12/22

6. Below is a list of properties and factors that may or may not be important when deciding on setting for an engagement ring. Please indicate how important each factor is in your decision on a setting for an engagement ring. (Select one for each statement)

TOP:
Very important
Important
Somewhat important
Not very important
Not at all important
Don't know

DOWN:
Durability
Scratch resistance
Tarnish resistance
Security of stone in the setting
Price
Jeweler's reputation
Brand of setting
Hypoallergenic properties
Look of Setting on finger
Looks of Setting over time
Quality of setting
Type of precious metal (e.g., Platinum/White/Yellow Gold)
Purity of precious metal in setting
The weight of the setting
Ability of jeweler to adjust the setting (e.g. resize)

ASK ALL

7. Using the scale below, how much do you know about the different precious metals that are sometimes used as settings for engagement rings? (Select One for each)

TOP:
Very knowledgeable about it
Fairly knowledgeable about it
Know some things about it
Don't know much about it
Don't know anything about it

DOWN:
Platinum
Silver
Titanium
White Gold
Yellow Gold

ASK GROUPS 12/22
8. Do you know what "14 kt" means when you see it on an engagement ring or other jewelry? (Select One)

Yes
No
Not sure

ASK GROUPS 12/22
ASK IF Q8=1 (YES)
9. What does it mean? (Please be as specific as possible. If nothing comes to mind, please type NA)

ASK GROUPS 12/22
ASK IF Q8=1 (YES)
10. How much of the precious metal does an engagement ring or other jewelry contain if it says "14 kt"? (Please specify a percent. Type in a whole number) <min 0><max 100>

_____%

ASK GROUPS 12/22
ASK IF Q8=1 (YES)
11. Is there a difference in the amount of a precious metal in an engagement ring or other jewelry if it says "18 kt" as opposed to "14 kt"? (Select One)

Yes
No
Not sure

ASK GROUPS 12/22
ASK IF Q11=1 (YES)
12. How much of the precious metal does an engagement ring or other jewelry contain if it says "18 kt"? (Please specify a percent. Type in a whole number) <min 0><max 100>

_____%

ASK GROUPS 12/22
13. Thinking about an engagement ring, how likely are you to consider each of these precious metals for an engagement ring? (Select one for each option)

TOP:
White Gold
Yellow Gold
Platinum
Silver

DOWN:
It's the one I'd definitely consider
It's one I'd most likely consider
It's one I'd probably consider
It's one I probably wouldn't consider but I might
It's one I probably wouldn't consider
It's one I definitely wouldn't consider
Don't know

ASK GROUPS 12/22
ASK Q.14 IF PLATINUM SELECTED IN Q.13, OPTIONS 1-4(It's the one I'd definitely consider/It's one/I'd most likely consider/It's one I'd probably consider/It's one I probably wouldn't consider but I might)

14. Assuming you were considering a platinum engagement ring, how much platinum would you expect in a "platinum" engagement ring? (Select One)

All or almost all platinum
90% or more platinum
80% or more platinum
75% (three-fourths) or more platinum
66.6% (two-thirds) or more platinum
50% (half) or more platinum
Less than 50% (half) platinum
It wouldn't matter how much platinum it had
Don't know/not sure

ASK GROUPS 12/22
15. Assuming you were considering a platinum engagement ring, would you expect the standard for a ring to be called "platinum" to be the same in the United States as in other countries around the world? (Select One)

Yes
No
Don't know/not sure

ASK GROUPS 12/22
16. Engagement rings have different percentages of a precious metal in their settings. The remaining percentages of the metal in the setting are base metals such as copper.

How important is it to you to know the percentage of the precious metal in an engagement ring setting before you buy it? (Select One)

Very important
Important
Somewhat important
Somewhat unimportant
Not important
Not at all important
Don't know/not sure

ASK GROUPS 12/22
ASK Q17 IF Q.16==1-4 (VERY IMPORTANT - SOMEWHAT UNIMPORTANT)
17. Assume you are in the market for a platinum engagement ring. If an engagement ring has 40% or more base metals, how would you expect to learn about the amount of base metals in the ring? (Select all that apply)

Advertising
Newspaper-magazine articles
Tag on the ring setting
Signs in jewelry store
Signs on jewelry store counters
Told by jewelry salesman/woman
Sales receipt
Information stamped on inside of ring
Other (specify)

ASK GROUPS 12/22
18. Assume you are in the market for a platinum engagement ring. Would you expect the engagement ring to be called "platinum" if it has 40% or more base metals? (Select One)

Definitely yes
Probably yes
Maybe
Probably not
Definitely not
It wouldn't matter to me
Don't know/not sure

ASK GROUPS 12/22
19. Assume you are in the market for a platinum engagement ring. If you were **informed** prior to purchase that the engagement ring had 40% or more base metals, would you expect the engagement ring to be called "platinum"? (Select One)

Definitely yes

Probably yes
Maybe
Probably not
Definitely not
It wouldn't matter to me
Don't know/not sure

ASK GROUPS 12/22

Assume you are in the market for a platinum engagement ring and assume that the engagement ring has all the properties of a "pure" platinum engagement ring but has 40% or more base metals.

ASK GROUPS 12/22

20. Would you expect such an engagement ring to be called "platinum"? (Select One)

Definitely yes
Probably yes
Maybe
Probably not
Definitely not
It wouldn't matter to me
Don't know/not sure

ASK GROUPS 12/22

21. How important would it be for you to know the properties of such an engagement ring before purchase? (Select one)

Very important
Important
Somewhat important
Somewhat unimportant
Not important
Not at all important
Don't know/not sure

ASK GROUPS 12/22
ASK IF Q.21== 1-4 (VERY IMPORTANT - SOMEWHAT UNIMPORTANT)
22. How would you expect to learn about the properties of such an engagement ring? (Select all that apply)

Advertising
Newspaper-magazine articles
Tag on the ring setting
Signs in jewelry store
Signs on jewelry store counters
Told by jewelry salesman/woman
Sales receipt
Information stamped on inside of ring
Other (specify)_____

ASK GROUPS 12/22
Again, assume you are in the market for a platinum engagement ring and assume that the engagement ring does not have all the properties of a "pure" platinum engagement ring and has 40% or more base metals.
ASK GROUPS 12/22
23a. Would you expect such an engagement ring to be called "platinum"? (Select One)

Definitely yes
Probably yes
Maybe
Probably not
Definitely not
It wouldn't matter to me
Don't know/not sure

ASK GROUPS 12/22
23b. How important would it be to know the properties of such an engagement ring before purchase?

Very important
Important
Somewhat important
Somewhat unimportant
Not important
Not at all important
Don't know/not sure

ASK GROUPS 12/22
ASK IF Q.23= 1-4 (VERY IMPORTANT -SOMEWHAT UNIMPORTANT)

24. How would you expect to learn about the properties of such an engagement ring? (Select all that apply)

Advertising
Newspaper-magazine articles
Tag on the ring setting
Signs in jewelry store
Signs on jewelry store counters
Told by jewelry salesman/woman
Sales receipt
Information stamped on inside of ring
Other (specify)_____

ASK GROUPS 12/22
ASK Q25 IF CODES "1-4" MENTIONED IN EITHER Q21 OR Q23B
25. Assume you are in the market for a platinum engagement ring. If an engagement ring has 40% or more base metals, which, if any, of the following information about the properties of the engagement ring would you like to know about before purchase? (Select One for Each)

TOP:
Definitely would
Possibly would
Might or Might not
Possibly wouldn't
Definitely wouldn't
DK

DOWN:
Durability
Scratch resistance
Tarnish resistance
Security of stone in the setting
Looks of setting over time
Hypoallergenic properties
Ability of jeweler to adjust the setting (e.g. resize)
Weight of the setting
Other (Specify)

ASK GROUPS 12/22

26. Do you currently own any platinum jewelry? (Select one)

Yes
No
Don't know/Not sure

ASK GROUPS 12/22
ASK Q.27 IF Q.26=1 (YES)

27. Is it an engagement ring? (Select one)

Yes
No
Not sure

ASK GROUPS 12/22
ASK Q.28 IF Q.26=1 (YES)

28. Did you buy the platinum jewelry for yourself or was it a gift from someone else? (Select one)

Bought it for myself
A gift from someone else
Can't remember

ASK GROUPS 12/22
ASK Q.29 IF Q.28=2 (A GIFT FROM SOMEONE ELSE)

29. Did you play any part in the selection of the platinum jewelry? (Select One)

Yes
No
Can't remember

ASK GROUPS 12/22
ASK Q.30 IF EITHER Q28 = 1 (BOUGHT FOR MYSELF) or Q.29=1 (YES)
ASK GROUPS 12/22

30. How important was the fact that the jewelry was platinum in your purchase decision? (Select one)

Very important
Important
Somewhat important
Somewhat unimportant
Unimportant
Not at all important
Don't know/Not sure

ASK ALL
ASK IF Q7=1-4 (FOR ANY OF THE METALS LISTED)

31. Do you know what... "585 plat; 0 pgm" means when found on an engagement ring? (SELECT ONE)

Yes
No
Not sure

ASK ALL
ASK IF Q31=1 (YES)
32. What does "585 plat; 0 pgm" mean? (Please be as specific as possible. If nothing comes to mind, type NA) *NO DECIMAL POINT

ASK ALL
ASK IF Q7=1-4 (FOR ANY OF THE METALS LISTED)
33. Do you know what "585 plat, 415 CO/CU" means when found on an engagement ring? (Select One) *NO DECIMAL POINTS
Yes
No
Not sure

ASK ALL
ASK IF Q33=1 (YES)
34. What does ".585 plat, .415 CO/CU" mean? (Please be as specific as possible. If nothing comes to mind, type NA) *NO DECIMAL POINT

APPENDED NFO DEMOGRAPHICS

APPENDIX B

(DATA TABULATIONS)

(CD Rom Attached)

APPENDIX C

VERBATIM RESPONSES

C1-Q9

q9 (n=273)
,"[n=174] 63.7% NET CORRECT ANSWERS"
,"[n=23] 8.4% 14 kt gold correctly defined (i.e. response gives precise proportion of gold in alloy) #001"
,,"10 other metals mixed with 14 counts of gold - (1058)"
,,"14 karat gold is 14 parts gold to 10 parts other metal, 24k being 24 parts gold. - (1263)"
,,"It refers to the amount of other metals mixed in with the gold in order to make it stronger. 14kt is approximately 50-60% fine gold, mixed with other metals. The high amount of other metal makes 14kt more durable than 18-24 kt, but it is also less precious as a result of this. - (1306)"
,,"It means the gold alloy is 58.3% pure gold - (1335)"
,,"14 parts gold 10 parts alloy - (1404)"
,,"14k(karat) is a measurement of the purity of the metal, out of a total scale of 24. 1k(karat) is 1/24th pure precious metal, with other metals mixed in. 24k would be pure metal. - (1464)"
,,"24 kt is pure gold. While 14 kt is 14/24th gold and the rest is made up of other metals. - (1528)"
,,"it is a measure of purity of the gold. 14kt gold is 58% (or 14/28) pure gold - (1693)"
,,"24K is pure gold. The number in front of the K is the number of parts of gold out of 24 that are in the alloy. 14K is 14 parts of gold and 10 parts of another metal - (1838)"
,,"14 karat gold is an alloy of about 58-60% gold, and the rest with, i believe, tin and or nickel - (1980)"
,,"14 / 24 % gold - (205)"
,,"24K is pure. 14K means that 14 parts are pure gold and the other 10 is mixed with other metals. The higher the Karat, the more pure the concentration of gold. - (2308)"
,,"other metals are mixed with the gold and 14 out of 24 parts are gold - (2532)"
,,"Well i think it means the purity of the gold is 14 carrots out of a possible 24k and that 14k is mixed with some other metals as well - (2693)"
,,"the amount of gold in a piece If it contains 14 parts of pure gold and 10 parts of a non gold metal which makes the piece 58.3% pure gold. - (2893)"
,,"14 karat or 14Kt gold is 14 out of 24 parts pure gold mixed with 10 parts of an alloy. - (2962)"
,,"It is 14 out of 24 parts pure gold. The higher the carat the more pure the gold will be but also the jewelry will be softer and less durable. - (3240)"
,,"It means its 14 parts gold to 10 parts other alloy - (3472)"
,,"14 carat. 24 carat is pure so 14 has other, stronger metals added. - (3601)"
,,"A measure of the purity of gold. 14-karat would be 14/24 pure gold. - (4271)"
,,"Means 14 parts gold to 10 parts other metals. This makes the combination hard enough so it does not deform/break easily. Good to have very precious stones/diamonds in this kind of metal. - (43)"
,,"contains 14 parts gold metal and 10 parts non gold metal equalling approximately 58 percent pure gold. - (4301)"
,,"14/24 part of pure gold so 14 part gold and 10 part other stuff - (4490)"
,"[n=60] 21.9% Gold karatage correctly defined in general terms (i.e. karatage explained as defining the purity, amount of gold in an alloy without being specific about 14k) #002"
,,"14 karat weight gold vs other metals in it - (1090)"
,,"Carats- ranging from low 10k to pure 24k. how pure a metal is. 10k is very low in pureness and 24k is pure for a particular metal - (1107)"
,,"the ratio of pure gold to alloys - (1194)"
,,"kt is a measure of the purity of the metal - (1275)"
,,"The highest purity is 24, so 14K is a middle or lower purity, but it's also more resistant to some wear and tear - (1297)"
,,"It how pure the gold is. The higher number of karat then the softer the metal the lower number of karat

then the harder the metal is. For instance, 10 karat gold won't bend as easily as 14 karat gold. - (137)"
,,"it means that the gold used in the ring/setting is 14kt, 24kt is pure gold - (1507)"
,,"the purity of the gold - a standard purity level that indicates it won't tarnish or fade - (1533)"
,,"type of measurement of the purity of gold - (1534)"
,,"the purity of the gold-the weight - (1556)"
,,"purity of the gold - (1560)"
,,"Refers to purity of metal, with 24 kt being 100% pure. - (1565)"
,,"The piece is 14 karat gold which is pure gold (24K I think) and some other addatives. It is more durable than pure gold. - (1577)"
,,"amount of pure gold in the jewelry; 24 karat is the highest I've seen (not sure what a Karat is). 10 karat starts looking fake. - (1590)"
,,"purity of the gold - (1602)"
,,"It indicates the pureness of the gold. - (1645)"
,,"karat refers to the amount of pure gold in the piece of jewelry. 14kt = more than half pure gold (slightly) - (1648)"
,,"The gold is made of 14 karat gold-24 karat is pure gold but is very soft so other metals are added to the gold to make it stronger-depending on how pure the gold is determines the karat. - (1675)"
,,"When speaking about gold (and presumably other precious metals) a carat references the purity of the metal - (1680)"
,,"The amount of gold that is used in the making of the ring (purity) - (1689)"
,,"the gold is 14 carat which has to do with the percentage of gold in the metal. 24 is the highest but it is soft. - (1815)"
,,"24kt is pure gold and is too maleable for a ring. 14kt is not pure and will hold up better against scratches and dents, 10kt is even better. - (1901)"
,,"that it is mixed with other alloys. Not a pure form of gold - (1941)"
,,"it shows the percent of the metal being used. 24kt is the highest - (2017)"
,,"It is a measure of the purity of the gold in the alloy. 24 kt is ""solid gold."" Most jewelry is either 10, 14, or 18 kt. - (2033)"
,,"It is 14 karot...it indicates how much pure gold is in the jewelry peice..the higher the number the more pure the gold piece...with 24 kt gold the most pure setting. - (2035)"
,,"the purity of the gold - (2173)"
,,"14k gold and rest mixture of other metals - (2185)"
,,"it determines how much actual gold is in the metal, the higher the number, the more pure gold is in it. - (2216)"
,,"karat refers to how pure the gold is on a 24 karat scale with 24 karats being the finest. 14 Karat means that the gold used for the ring has other impurities (i.e. not gold) mixed in with it which makes the ring somewhat more durable but also not as valuable. - (2283)"
,,"purity of gold in metal out of 24k pure! - (2408)"
,,"Percaentage of pure gold in a ring - (2852)"
,,"14 kt means 14 karats, which translates into the purity of metal. I believe that pure gold is 28 or 32 karat? Thus, 14 kt would be about half pure? - (2937)"
,,"14 kt would be on a gold ring; it refers to the purity of the gold. 14 is mixed with other metals so it's not pure gold, which would be 24 kt. - (2953)"
,,"it is the purity of the gold - (2986)"
,,"It is the purity of the metal - (3030)"
,,"The percentage of gold to other metals to make stornger. The higher the number the larger the percentage of gold and the softer the metal. - (3044)"
,,"gold content like 10k 14k 21k & 24k the higher the caret weight the more pure gold content. - (3091)"
,,"purity of gold. 24kt is pure gold so 14 has impurities - (3124)"
,,"the purity of the metal - (314)"
,,"14 kt refers to the purity of the gold and therefore it's softness. 14kt is less pure than 18kt and therefore less soft. - (3186)"
,,"the purity of the gold - (3277)"

„"the karat or purity of the gold - (3320)"
„"Purity of the gold related to impurities in alloy - (3333)"
„"It indicated the quality or purity of the metal - (3379)"
„"The weight/purity/content of the gold. - (3438)"
„"It is the purity of the metal. - (3467)"
„"out of a 24 carat scale, the gold is 14 carat pure. - (349)"
„"14 karat gold out of 24kt being pure - (3894)"
„"It is the purity of the gold or other metal that the ring is made from. 14 as opposed to 24 kt. - (3901)"
„"the percentage of gold with respect of other alloys - (3916)"
„"The purity of the precious metal. - (4124)"
„"The level of gold purity - (4161)"
„"it is not as pure as 24K gold it has something added to it - (418)"
„"The amount/purity of the gold in the item. - (4219)"
„"It means 14 Karats when referring to the amount of a particular metal in the setting. 24 Karat gold would be pure gold for example. - (4258)"
„"For the metal, it is the purity. - (4436)"
„"14 kt means the karat of the setting which is the quality of the blend of the metal use for the setting - (4458)"
„"contains 14 parts pure gold - (4461)"
„"measure of pure metal in setting - (508)"
„"[n=58] 21.2% Describes properties of different gold karatages in general (i.e. the higher the gold content, the karatage, the number, the softer the alloy) #003"
„"the purity of the gold which relates to the softness, the more kt the more soft. - (1078)"
„"it has a total of 14 karots of gold. It is pretty strong. The higher the number, the softer the gold - (1079)"
„"the amount of gold particles the ring is composed of - (1144)"
„"That is the weight/quality of the gold. - (1173)"
„"The durability / strength of the gold - (1175)"
„"the softness of the metal - (1262)"
„"The higher the number, the softer the metal. 14 is a more common karat. - (1286)"
„"14 kt means the weight in the gold and also tells you about durability and quality - (1375)"
„"it is a measurement of how much gold is in the metal versus the alloy that it is mixed with. - (1414)"
„"the quality of the gold - (1454)"
„"Purity of the gold; lower the number the less pure (higher alloy content). - (1460)"
„"14 karat gold. 24 karat is perfect but more easily bends than 14 karat - (1466)"
„"It means it's 14 karats. Its more durable than 18 karats...so forth, but also its less precious than a higher kt. - (1469)"
„"14k reffers to 14karat gold or the purity of the gold. 24karat gold is about as pure as you are going to get but it lacks the durability that 14k would have. gold is very soft and is mixed with other metals to make it stronger - (1541)"
„"That the gold is 14 carats...the higher the #, the better. - (1703)"
„"14kt means the metal is 14 karets refering to it's strenth and softness of the metal - (1717)"
„"a blend of gold and other metal --- not pure gold - but studier and less dent resistant - (1852)"
„"14 CARROT GOLD MEANS THEIR IS AHIGHER PERCENTAGE OF ACTUAL GOLD IN THE RING IT HAS A BETTER CHANCE OF RETINING VALUE AND WILL HOLD UP STRONGER - (1882)"
„"14 Karat Gold (How much gold is in the ring) - (1943)"
„"not as soft, not as precious of a metal as a higher level karat (e.g. 18k) - (2024)"
„"It means that the weight of the gold used is equal to 14 karats. The gold is soft and pliable. - (2030)"
„"it is an indicator of the amount of gold in the metal of the ring, the higher the karat the softer the metal - (2288)"
„"how real it is and also how soft or hard the metal is - (2354)"

,,"It is the weight of the gold in the metal... higher the number, the purer the gold - (2356)"
,,"ratio of gold to other metals - (2365)"
,,"That is the weight of the percentage of gold in the metal. - (2384)"
,,"Concentration of gold in the metal of the ring. - (2404)"
,,"It is not 100% gold. It mixes with other substances. 10K and 14K are almost similar. - (2427)"
,,"14k gold is often used for earrings due to the fact that it is less durable and softer than 10k gold. I would rather have a 10k or platinum ring. It's the amount of gold in the ring. - (2512)"
,,"The type of gold, the proportion of the actual gold in the mix. - (2548)"
,,"the amount of gold in the item - (2551)"
,,"It's the purity of gold. - (2635)"
,,"14kt is gold. A heavy gold. - (2650)"
,,"it is 14 karat wieght the more karat the more it costs - (2655)"
,,"The softness of the metal - (2825)"
,,"the amount of mineral is in the ring. The higher the kt. the better the ring. - (2863)"
,,"It is the kind on gold. 14 K is stronger and more durable. - (2965)"
,,"14 kt is the wt of the gold, which the higher the kt #, the thinner and less durable it is - (2985)"
,,"That is measure scale to measure the purity of gold, whether white or yellow. - (3015)"
,,"14 kt is not as high quality. It is not as soft and pliable as 24 kt. - (3069)"
,,"the quality of gold used - also the higher the number the more pliable the metal - (3075)"
,,"IT IS SOFT GOLD - (3092)"
,,"the weight/purity of gold in the jewelry - (3176)"
,,"it refers to the gold content of the metal - (3235)"
,,"the amount of gold making up the alloy - (3311)"
,,"it has 14 karats of gold and is lesser quality than, say, 18k - (3376)"
,,"14 Karot gold is a good qality not as good as 24 but better than 10K - (3415)"
,,"Something to do with the amount of pure gold in the alloy - (3487)"
,,"14 Carat Gold out of 24 - (3531)"
,,"It is the amount of gold present in the ring. - (3616)"
,,"The quality or fineness of the gold. Others that I've bought are 10k 18K, and I not sure if it was 20K or 24K - (3666)"
,,"hardness of metal - (3924)"
,,"the gold is 14 carats, the higher the carat the softer it is - (4014)"
,,"Its the ratio of alloys - (4088)"
,,"14 carat. Amount and quality of gold used. - (4156)"
,,"amount of gold - (4320)"
,,"The softness of the metal. - (4582)"
,,"the percentage of gold - (530)"
,"[n=33] 12.0% Other correct answers #004"
,,"Weight of gold - (1074)"
,,"14 karat gold, weight of gold - (1077)"
,,"that is the carat wight of the gold - (1149)"
,,"The weight of the gold - (1231)"
,,"It is a weight of gold. - (1237)"
,,"weight of gold - (1300)"
,,"weight of the gold - (1352)"
,,"weight of gold - (1381)"
,,"karat refers to how fine the gold is or the weight of it or a gem. - (1484)"
,,"THE QUALITY OF THE METAL - (1487)"
,,"the weight of the gold - (1688)"
,,"it is the weight of the gold - (1704)"
,,"The amount of gold present in terms of weight. the karat is i think a measurement for gold used in the

Middle East. - (1805)"
,,"measure of quality - (1884)"
,,"A certain quality of gold - (2075)"
,,"it's the weight of the gold, the bigger the number the better. ex: 14 is better then 10 - (2291)"
,,"It is a grade of gold, indicating the weight. - (2336)"
,,"it is a specific amount of gold applied to the ring - (2418)"
,,"weight and quality of gold - (2444)"
,,"It's the weight of the gold. - (2446)"
,,"the level or grade of gold graded by karats. it is the quality between 10k and 18k - (2570)"
,,"amount of gold in alloy - (2595)"
,,"amount of gold - (2657)"
,,"the quality of the gold - (2666)"
,,"14 karats is the weight of the gold - (2912)"
,,"It has to do with the weight of the metal. - (3048)"
,,"14k in gold or white gold means the weight of the gold in the piece if we are speaking in terms of diamond ktw its how many karets the stone is . - (369)"
,,"karat weight of gold - (3745)"
,,"I believe it is the weight amount of gold that is used to make the ring. - (377)"
,,"how much gold there is per a certain amount of weight as opposed to metal - (4013)"
,,"weight of gold on setting - (4351)"
,,"It is the Tare weight of the gold in the ring. - (4371)"
,,"Not pure gold but still good quality. - (4378)"
,"[n=80] 29.3% NET INCORRECT ANSWERS"
,"[n=68] 24.9% Incorrect answers (e.g. 14% gold) #005"
,,"Not pure - (1071)"
,,"14 carat gold - (1117)"
,,"14k gold - (1124)"
,,"It is not 100% gold. - (1130)"
,,"14 karrat gold - (1139)"
,,"14 carrot gold - (1176)"
,,"the amount of carat - (1180)"
,,"14 karat gold - (1204)"
,,"it isnt 100 percent gold all the way through, but the metal is covered in 14karat gold. - (1207)"
,,"not 100% gold - (1360)"
,,"14 karat gold - (1386)"
,,"14 carot gold - (14)"
,,"that the ring is 14 karat gold - (1490)"
,,"14 KARAT GOLD - (1604)"
,,"14% gold. More solid than 18 or 24k, but less content of gold. - (1666)"
,,"14 carat gold. It's the thickness of the gold used. - (1747)"
,,"that the gold is 14karat - (1763)"
,,"made of 14 karat gold - (1803)"
,,"The type of gold it is - (1818)"
,,"14 karat quality of gold - (1822)"
,,"pure gold - (1911)"
,,"14 karat gold - (1944)"
,,"14 karat gold - (1955)"
,,"14 Carats of gold - (1982)"
,,"14K gold, silver, etc - (2106)"
,,"14 karat gold - (2158)"
,,"size - (2245)"

,,"14 karats of gold - (2246)"
,,"how many karats the metal has - (2341)"
,,"the size of the stone - (2515)"
,,"50% gold - (2680)"
,,"14 karot gold which is less gold than 24 karot - (2805)"
,,"tHE SETTING IS MADE FROM 14KT GOLD - (2947)"
,,"14 ct gold - (2955)"
,,"It means it's 14 karat gold. - (2974)"
,,"What come to mind is that its more than 10 karat gold. - (3005)"
,,"It's the gram of gold. - (302)"
,,"Gold at a fourteen karat level was used in the makeup of the ring - (3023)"
,,"It means 14 karat gold. Pretty durable. - (3058)"
,,"14 carats of gold, 4 carats more than 10kt. - (3066)"
,,"14 carat gold, indicated type of gold - (3143)"
,,"fourteen karats gold - (3146)"
,,"14 carat gold - (3175)"
,,"The ring is 14 karate gold - (3284)"
,,"14 kt. gold - (3344)"
,,"14karat gold - (3435)"
,,"the carat weight - (3441)"
,,"14 karats means the weight of the peice - (3463)"
,,"weight of karat - (3464)"
,,"the amount of carrats that is in either the gold or the stone itself - (3471)"
,,"14 Karrats of gold or white gold - (3497)"
,,"14 Carat Gold - (3555)"
,,"14 kt gold. It is a measure of the ""hardness"" of the gold. The lower the kt, the easier it is to scratch. - (3605)"
,,"14 karat gold - (3638)"
,,"it is 14 karrot gold - (3869)"
,,"the number of K's in the amount of the gold - (3931)"
,,"It is 75% pure gold. - (3965)"
,,"Relatively low amount of fold in alloy. - (4007)"
,,"Nearly gold. 80% I think. - (4180)"
,,"its a 14 karat cut stone - (4252)"
,,"It is the percentage of the certain type of metal in the ring, so a higher karrot is a harder more durable metal. - (433)"
,,"The type of nugget of gold used to make the ring - (4522)"
,,"The percentage of gold - (4567)"
,,"14 karat gold - (4584)"
,,"THERE ARE 14 KTS OF GOLD IN THAT JEWELRY - (484)"
,,"14 karat gold - (507)"
,,"It is the karat of the gold - (556)"
,,"14 karat gold means purest state og gold without any blemishes - (81)"
,"[n=12] 4.3% No additional information (i.e. all those who just wrote 14 karat) #006"
,,"14 karat - (1264)"
,,"14 karat - (148)"
,,"14 karat - (2191)"
,,"14 karot - (2395)"
,,"14 karat weight - (2519)"
,,"fourteen karat - (2740)"
,,"14 Karat - (2921)"

,,"14 karats - (3089)"
,,"14 karat - (3093)"
,,"14 karat - (3222)"
,,"14 carats - (4278)"
,,"14 Karat - (4488)"
,"[n=19] 6.9% Nothing/none/na #998"
,,"NA - (1501)"
,,"n/a - (1574)"
,,"NA - (1820)"
,,"na - (1877)"
,,"NA - (188)"
,,"na - (208)"
,,"NA - (2282)"
,,"na - (247)"
,,"na - (2523)"
,,"na - (2619)"
,,"na - (2754)"
,,"NA - (2786)"
,,"NA - (2846)"
,,"n/a - (298)"
,,"na - (3003)"
,,"na - (3557)"
,,"na - (3590)"
,,"NA - (3664)"
,,"na - (429)"

C.2 –Q25

q25a (n=171)
,"[n=12] 7.0% Anything/everything #100"
,,"i'm spending that kind of money, i want to know EVERYTHING!! - (1300)"
,,"everything - (1803)"
,,"whatever came to mind at the time - (2075)"
,,"anything - (2191)"
,,"everything that is applicable - (2245)"
,,"Anything and everything I can learn prior to making such a purchase - (2548)"
,,"about the diamond - (2619)"
,,"anything remotely relevant - (3172)"
,,"all relevant info - (3438)"
,,"everything possible - (418)"
,,"Anything not covered in the other categories - (4371)"
,,"everything possible about it--even past customer input - (4584)"
,"[n=48] 28.0% Cost/price/value #101"
,,"cost - (1058)"
,,"price - (1071)"
,,"cost - (1139)"
,,"cost - (1173)"
,,"Cost and carrot weight - (1176)"
,,"cost - (1180)"
,,"Value over time - (1231)"
,,"Value - (1286)"
,,"value in the future - (1355)"
,,"what the ring is really worth and price - (137)"
,,"the popularity of the ring, lasting effects, value - (1381)"
,,"cost - (1426)"
,,"Value of it versus other rings - (1466)"
,,"price - (1490)"
,,"the price - (1528)"
,,"Maintenance, replacement, repair costs - (1538)"
,,"price, durability - (1622)"
,,"if the price is accurate - (1872)"
,,"THE RESALE VALUE OF A RING - (1882)"
,,"price - (1955)"
,,"value - (205)"
,,"the price - (2098)"
,,"cost - (2112)"
,,"Metal content value of metal - (2185)"
,,"what other metals are in the ring; how it affects resale value - (2283)"
,,"repurchase value among other things - (2408)"
,,"price - (2427)"
,,"the cost - (2655)"

,,"price and comparrison - (2680)"
,,"cost - (2805)"
,,"Cost in other locations - (2846)"
,,"price - (2937)"
,,"Different pricing - (3005)"
,,"value - (3023)"
,,"karats, cost, durability - (3089)"
,,"Cost - (31)"
,,"price - (3333)"
,,"will it hold value over time - (3415)"
,,"appraisal, the value of the ring. - (3497)"
,,"best price - (3547)"
,,"price - (3555)"
,,"price - (3612)"
,,"price, warranty - (3664)"
,,"resale value - (3869)"
,,"price - (4014)"
,,"Retained value - (4180)"
,,"price - (553)"
,,"price - (556)"
,"[n=5] 2.9% Comparisons #102"
,,"Value of it versus other rings - (1466)"
,,"price and comparrison - (2680)"
,,"If I could get it apprised somewhere else & then bring it back if it is not all gold - (302)"
,,"comparisons to other rings, competitors - (3093)"
,,"Comparison with 100% platinum ring - (434)"
,"[n=2] 1.1% Impurities/imperfections #103"
,,"impurities.... - (1360)"
,,"different grades of stones - (14)"
,"[n=4] 2.3% Insurance information #104"
,,"insurance info - (1237)"
,,"flexibility, wear and tear, insurance, how other people like it - (3609)"
,,"insurance quote - (3638)"
,,"INSURANCE INFO - (484)"
,"[n=4] 2.3% Longevity/life span #105"
,,"the popularity of the ring, lasting effects, value - (1381)"
,,"who made the ring, what the expected lifespan is. - (1763)"
,,"how long will it last - (2173)"
,,"How base metals will affect each other over time - (508)"
,"[n=2] 1.1% Look/feel on my hand #106"
,,"how it looks on my hand - (1693)"
,,"how it would feel on my finger - (2246)"
,"[n=4] 2.3% Maintenance/care of setting/diamond #107"
,,"Maintenance, replacement, repair costs - (1538)"
,,"If I could get it cleaned/maintained anytime for free - (2106)"
,,"warranty / maintenance information - (3487)"
,,"care of setting - (3916)"
,"[n=13] 7.6% Metal composition #108"

,,"what base metals are being used - (1306)"
,,"what other metals are in it - (1414)"
,,"% of base metals - (1469)"
,,"The pros and cons of having a high or low amount of base metals - (1805)"
,,"Whether or not what is actually advertised really is the metal is says - (188)"
,,"reaction to the base metal - (2017)"
,,"Metal content value of metal - (2185)"
,,"what other metals are in the ring; how it affects resale value - (2283)"
,,"If I could get it apprised somewhere else & then bring it back if it is not all gold - (302)"
,,"percentages of metals - (3441)"
,,"all the metals the band is composed of - (433)"
,,"properties of base metals - (4490)"
,,"How base metals will affect each other over time - (508)"
,"[n=9] 5.2% Origination/where did it come from #109"
,,"Where was the ring manufactured? Would I be able to bring my own loose diamonds for setting? - (1157)"
,,"location it was from - (1204)"
,,"who made the ring, what the expected lifespan is. - (1763)"
,,"where it came from - (1941)"
,,"Where the stone comes from - (1982)"
,,"origins - (3379)"
,,"Country where gem was mined - (3931)"
,,"maker - (4461)"
,,"Origin of platinum (country) - (530)"
,"[n=3] 1.7% Popularity #110"
,,"popularity - (1207)"
,,"the popularity of the ring, lasting effects, value - (1381)"
,,"febibility, wear and tear, insurance, how other people like it - (3609)"
,"[n=7] 4.0% Quality/clarity/color of stone #111"
,,"Why is it such low purity - (1565)"
,,"stone quality - (1688)"
,,"clarity of diamond - (2395)"
,,"quality of ring - (2961)"
,,"quality - (3464)"
,,"The quality of the diamond. - (3616)"
,,"clarity, color - (398)"
,"[n=11] 6.4% Warranty/guarantee #112"
,,"guarantee - (1079)"
,,"warrenty - (1124)"
,,"Warranty, International Standards - (2356)"
,,"The type of warranty the ring carries - (2515)"
,,"Warranty - (2650)"
,,"warrenty - (3344)"
,,"warranty / maintenance information - (3487)"
,,"price, warranty - (3664)"
,,"Replacement Guarantee - (370)"
,,"The warranty on the ring - (377)"
,,"warranty - (4088)"
,"[n=4] 2.3% All others #113"

,,"designer - (2308)"
,,"Warranty, International Standards - (2356)"
,,"how long theyve had the ring in there store for sale - (2693)"
,,"Brand - (2772)"
,"[n=38] 22.2% Nothing/none/na #998"
,,"NA - (1107)"
,,"none - (1116)"
,,"n/a - (1130)"
,,"na - (1375)"
,,"nothing - (1386)"
,,"NA - (148)"
,,"NA - (1840)"
,,"none - (1884)"
,,"None - (1944)"
,,"na - (208)"
,,"nothing - (2158)"
,,"NA - (2282)"
,,"Nothing I can think of. - (2371)"
,,"None - (2404)"
,,"NA - (2444)"
,,"na - (247)"
,,"none - (2519)"
,,"n/a - (2523)"
,,"NA - (2786)"
,,"00 - (2825)"
,,"n/a - (2974)"
,,"n/a - (298)"
,,"none - (3028)"
,,"none - (3041)"
,,"n/a - (3143)"
,,"nothing else - (3152)"
,,"N/A - (3277)"
,,"na - (3471)"
,,"none - (349)"
,,"na - (3557)"
,,"NONE - (3605)"
,,"na - (3745)"
,,"none - (3910)"
,,"n/a - (4013)"
,,"no - (4129)"
,,"n/a - (4271)"
,,"na - (4320)"
,,"NA - (4567)"
,"[n=12] 7.0% Don't know/no answer #999"
,,"don't know - (1501)"
,,"not sure - (1645)"
,,"Not sure right now, but before buying I would have to seriously sit down and come up with some questions - (1675)"
,,"dont know - (1901)"

,,"yes - (1911)"
,,"i don't know at the moment - (1980)"
,,"? - (2033)"
,,"not sure - (2955)"
,,"not sure - (3007)"
,,"not sure - (3010)"
,,"don't know - (3284)"
,,"don't know - (507)"
,"[n=11] 6.4% PRELISTED CODES"
,"[n=4] 2.3% Durability #001"
,,"will it bend or dent - (1262)"
,,"price, durability - (1622)"
,,"karats, cost, durability - (3089)"
,,"febdibility, wear and tear, insurance, how other people like it - (3609)"
,"[n=0] 0.0% Scratch resistance #002"
,"[n=0] 0.0% Tarnish resistance #003"
,"[n=0] 0.0% Security of stone in the setting #004"
,"[n=3] 1.7% Looks of setting over time #005"
,,"different ways i can have it set, with the same amount of stone - (1838)"
,,"style of the stones - (3066)"
,,"Looks - (4488)"
,"[n=0] 0.0% Hypoallergenic properties #006"
,"[n=0] 0.0% Ability of jeweler to adjust the setting (e.g. resize) #007"
,"[n=5] 2.9% Weight of the setting #008"
,,"Cost and carrot weight - (1176)"
,,"What karat means. - (2632)"
,,"karats, cost, durability - (3089)"
,,"actual metal weight - (3590)"
,,"total kt of diamonds - (4458)"

C3 –Q17

q17_97_oth (n=29)
,"[n=6] 20.6% Appraisal/authenticity #100"
,,"certificate of authentication - (1144)"
,,"appraisal paperwork - (1306)"
,,"certificate of authenticity - (2308)"
,,"Certified Document - (2356)"
,,"GIA certified - (2619)"
,,"ask jeweler appraiser - (2693)"
,"[n=3] 10.3% Ask/I would ask someone #101"
,,"knowlegable friend - (1818)"
,,"ask - (3028)"
,,"I would ask - (3075)"
,"[n=2] 6.8% Flyer/brochure/pamphlet #102"
,,"pamphlet - (2288)"
,,"Pamphlet - (434)"
,"[n=11] 37.9% Internet research #103"
,,"Internet - (148)"
,,"Internet - (1538)"
,,"intenet - (1574)"
,,"internet - (2246)"
,,"internet - (2523)"
,,"Internet research - (2548)"
,,"internet - (2666)"
,,"internet - (2680)"
,,"look it up on the net - (3666)"
,,"internet - (3894)"
,,"Internet - (43)"
,"[n=0] 0.0% Library research #104"
,"[n=6] 20.6% Research on company/brand/just research #105"
,,"research on company - (1194)"
,,"research on brand - (1645)"
,,"research - (2912)"
,,"research - (3415)"
,,"research/reading - (3438)"
,,"Online research - (4124)"
,"[n=0] 0.0% All others #106"
,"[n=1] 3.4% PRELISTED CODES"
,"[n=0] 0.0% Advertising #001"
,"[n=0] 0.0% Newspaper-magazine articles #002"
,"[n=0] 0.0% Tag on the ring setting #003"
,"[n=0] 0.0% Signs in jewelry store #004"
,"[n=0] 0.0% Signs on jewelry store counters #005"
,"[n=1] 3.4% Told by jewelry salesman/woman #006"

,,"saleslady - (3803)"
,"[n=0] 0.0% Sales receipt #007"
,"[n=0] 0.0% Information stamped on inside of ring #008"

C4 – Q22

q22_97_oth (n=36)
,"[n=6] 16.6% Appraisal/authenticity #100"
,,"certificate of authentication - (1144)"
,,"appraisal paperwork - (1306)"
,,"Official Disclosure Document - (2356)"
,,"appraiser - (2693)"
,,"independent appraisal - (3023)"
,,"Appraisal - (3093)"
,"[n=4] 11.1% Ask/I would ask someone #101"
,,"knowlegable friend - (1818)"
,,"ask - (3028)"
,,"FAMILY - (3092)"
,,"Friends and experts - (43)"
,"[n=2] 5.5% Flyer/brochure/pamphlet #102"
,,"booklet - (1286)"
,,"information pamphlet - (2288)"
,"[n=13] 36.1% Internet research #103"
,,"research online through multiple sources - (1090)"
,,"internet or library research - (1130)"
,,"Internet - (148)"
,,"Internet - (1538)"
,,"internet research - (2336)"
,,"jewelry info websites - (2519)"
,,"Internet research - (2548)"
,,"internet study - (2680)"
,,"internet - (2852)"
,,"Internet Research - (3044)"
,,"internet - (3124)"
,,"look it up on the net - (3666)"
,,"internet - (429)"
,"[n=1] 2.7% Library research #104"
,,"internet or library research - (1130)"
,"[n=10] 27.7% Research on company/brand/just research #105"
,,"research on company - (1194)"
,,"other research - (1577)"
,,"research brand - (1645)"
,,"outside research - (2512)"
,,"research - (2912)"
,,"Research - (2962)"
,,"research - (3075)"
,,"independent research - (3235)"
,,"research - (3438)"
,,"research - (3464)"
,"[n=0] 0.0% All others #106"
,"[n=1] 2.7% PRELISTED CODES"

,"[n=0] 0.0% Advertising #001"
,"[n=0] 0.0% Newspaper-magazine articles #002"
,"[n=0] 0.0% Tag on the ring setting #003"
,"[n=0] 0.0% Signs in jewelry store #004"
,"[n=0] 0.0% Signs on jewelry store counters #005"
,"[n=1] 2.7% Told by jewelry salesman/woman #006"
,,"sales lady - (3803)"
,"[n=0] 0.0% Sales receipt #007"
,"[n=0] 0.0% Information stamped on inside of ring #008"

Attachment B

Hall & Partners USA Inc.

Presentation

Platinum Brand and Advertising Tracking Pre Wave

Prepared for:

September, 2003

Background

Methodology

Pre wave of brand and advertising tracking conducted before the launch of Platinum's new advertising campaign

– **600 interviews conducted online** (375 women and 225 men)

Who did we talk to:

- Ages 18-34 for women and 25-34 for men
- Income of 30,000+ for women and $40,000+ for men
- Completed some college

We Established Three Quota Groups:

➢ Currently engaged with a ring and planning to get married in the next 1 ½ years

➢ Thinking about getting engaged in the next year and shopping for an engagement ring

➢ Thinking about getting engaged in the next year and not yet shopping for an engagement ring

When did we talk to them:

July 21st Thru August 3rd 2003

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Summary of Initial Findings

AMONG WOMEN

- **Women in all phases of the engagement process consider Platinum most often as a precious metal for engagement rings.**
  - **They know a great a deal about Platinum even before the "shopping" process has begun.**
  - **They clearly view Platinum as the leading precious metal.**
  - **And are well informed about its rational benefits (strong, high quality, good investment)**
  - **The "Pure, Rare and Eternal" positioning should resonate with them, since they already feel that these are appropriate for Platinum.**

Summary of Initial Findings

AMONG WOMEN

- **Even engaged women that received a precious metal *other than* Platinum still desire Platinum.**
  - **Their consideration of Platinum may be relatively weaker, though this is probably due in large part to them not having received Platinum.**
  - **These engaged women that don't have Platinum rings also tend to rate White Gold higher than the women who are not engaged... perhaps evidence that they are justifying what they have.**
  - **A large number of these women also strongly identify with Yellow Gold, which is an indication that some women prefer a different look.**

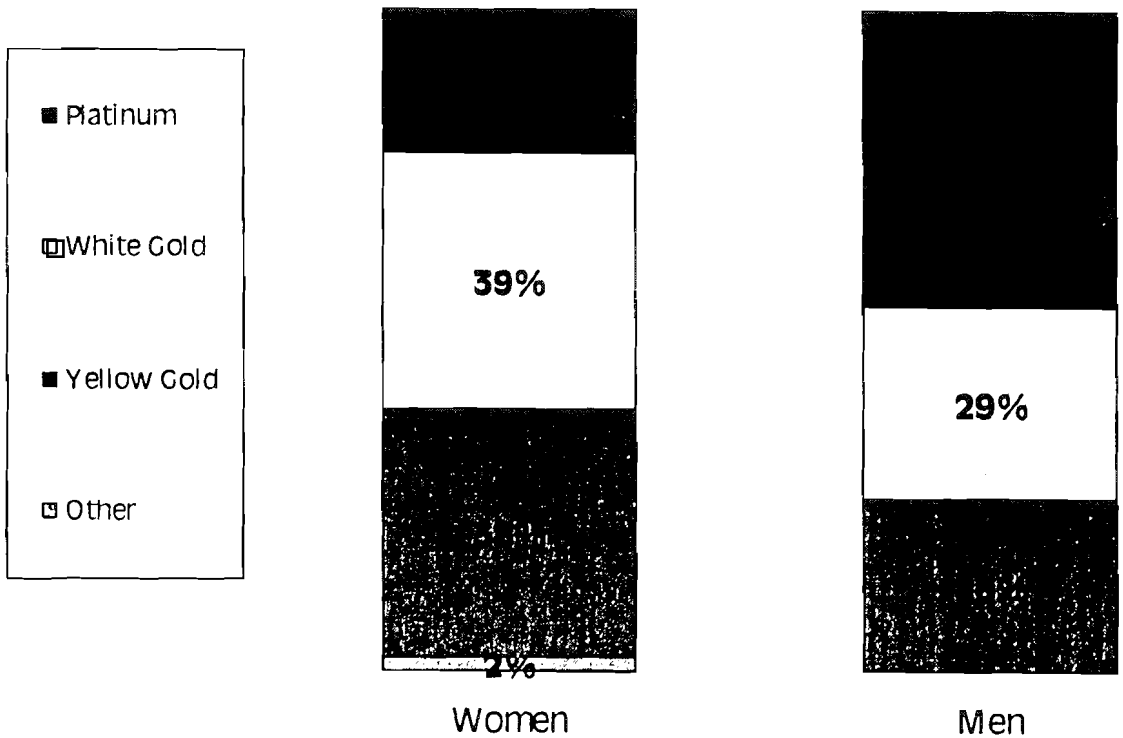
Summary of Initial Findings

AMONG MEN

- For men, the engagement process is about gaining familiarity
  - The more they find out about Platinum the more strongly they consider it
    - They know it's seen as "better" than other metals and the metal that everyone wants.
  - During the initial stages of thinking about a ring, men understand the key equities of "pure, rare, eternal"
  - However they are not as aware of the cost of Platinum until they enter the shopping stage

Ownership of platinum is much larger among men than women

What is your engagement ring made of?



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Base: All Women/Men that are engaged with a ring (125/76)
QB6 You said earlier that you already have an engagement ring. Which of the following precious metals is the ring made of?

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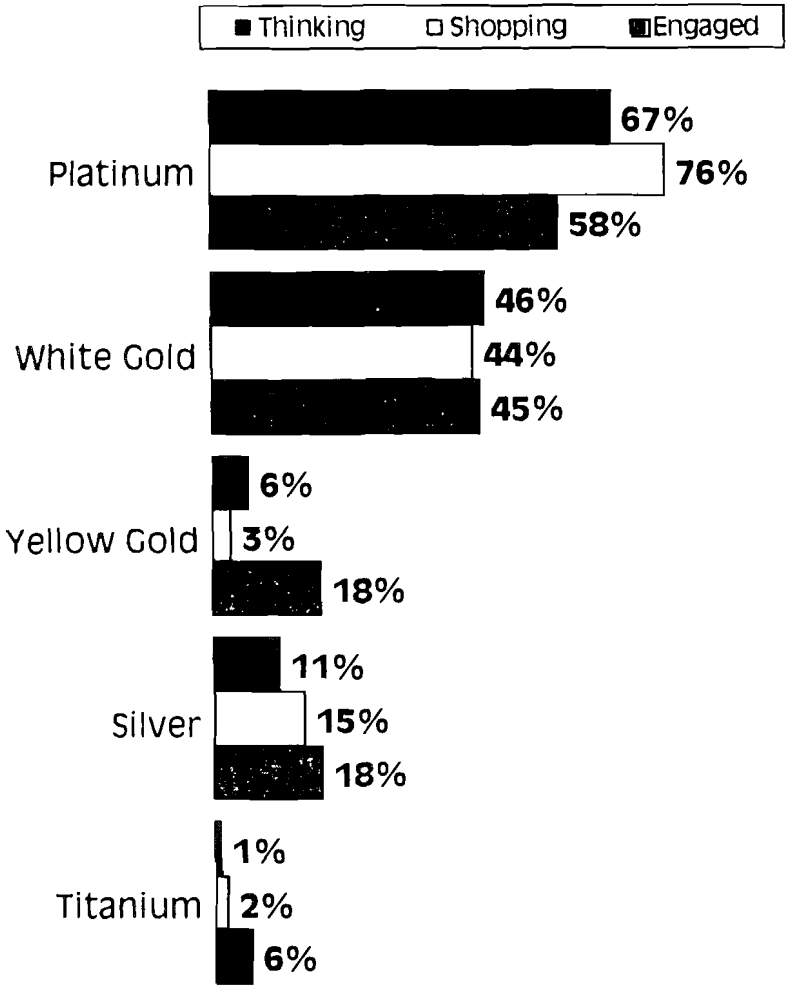
Understanding Women's Relationship with Platinum

Women in all phases of the engagement process consider Platinum most often as a precious metal for engagement rings

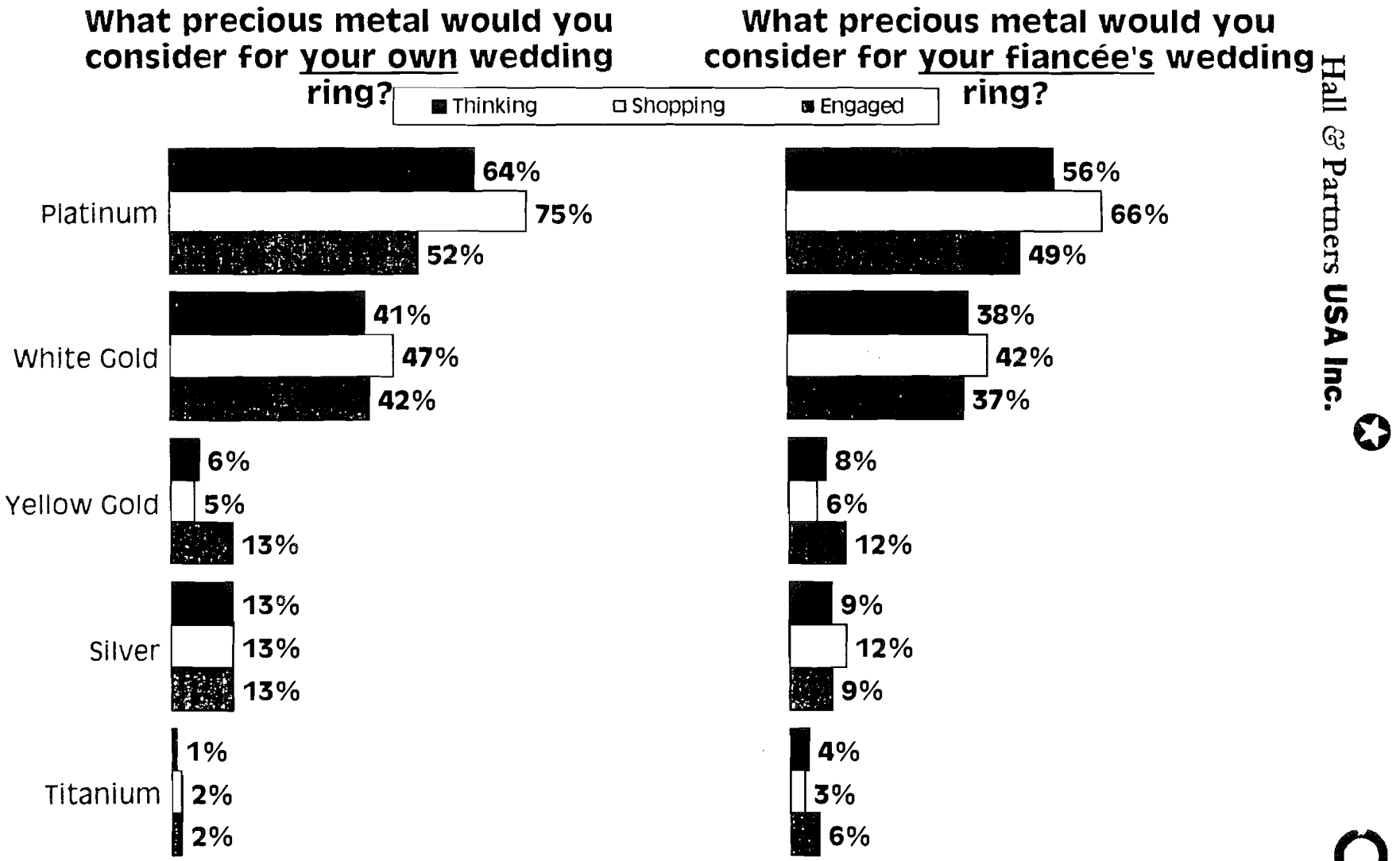
What precious metal would you consider for your engagement ring



Base: All Women By Segment (n = 125 for each)

Q1 When thinking about **engagement rings**, what precious metals would you consider buying?

It is also most highly considered for wedding rings, for themselves as well as their fiancée.



Base: All Women By Segment (n = 125 for each)

Q2a Now thinking about **wedding rings**, what precious metal would you consider for **your** wedding ring?

Q2b And, what precious metal would you consider for **your fiancée's** wedding ring?

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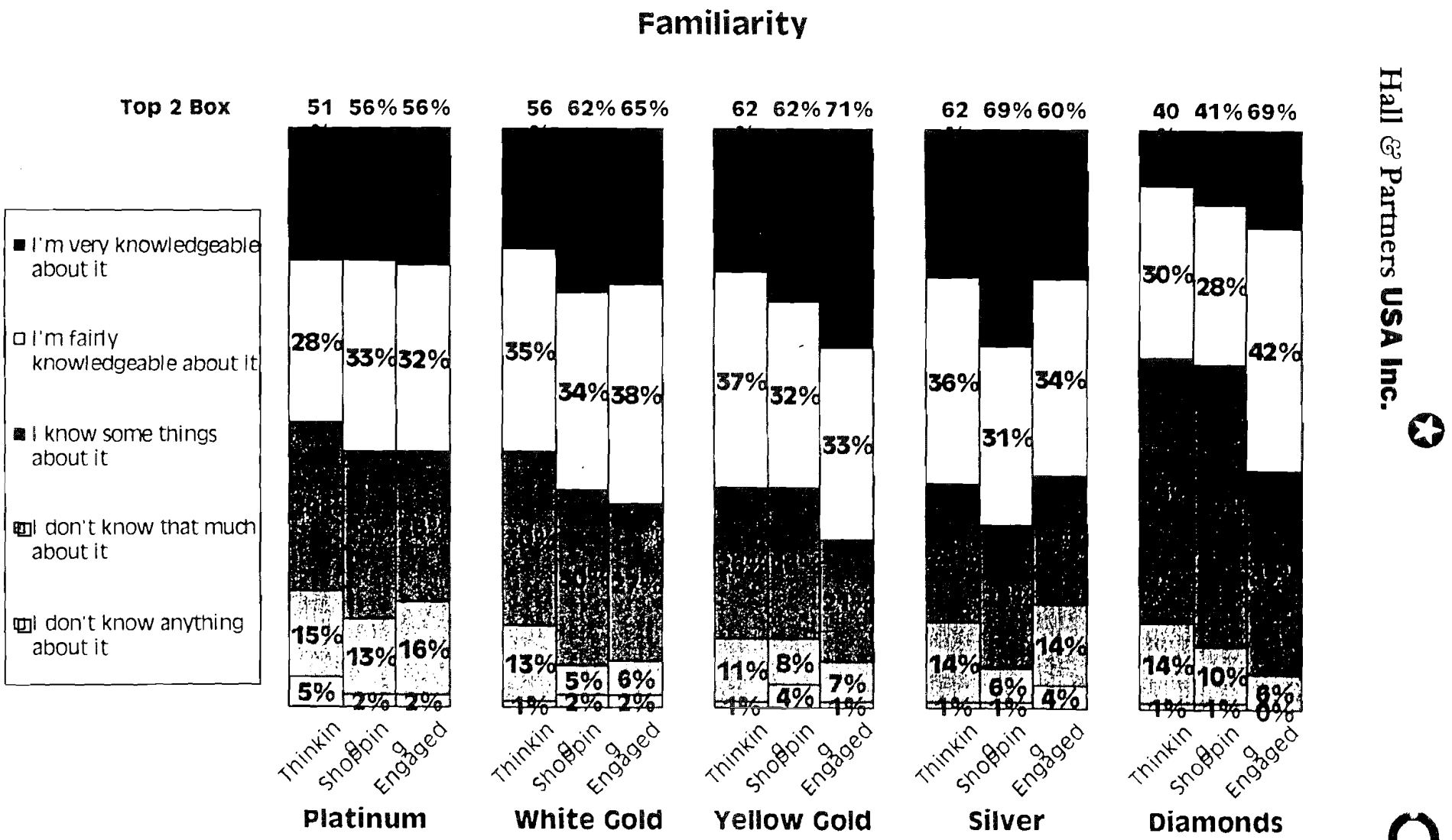
Familiarity with Platinum is fairly uniform across groups, not surprisingly women who are engaged know the most about diamonds



Base: All Women By Segment (n = 125 for each)

Q7a Now using the scale below, how much do you know about the following precious metals?

Q7b And, how much do you know about diamonds?

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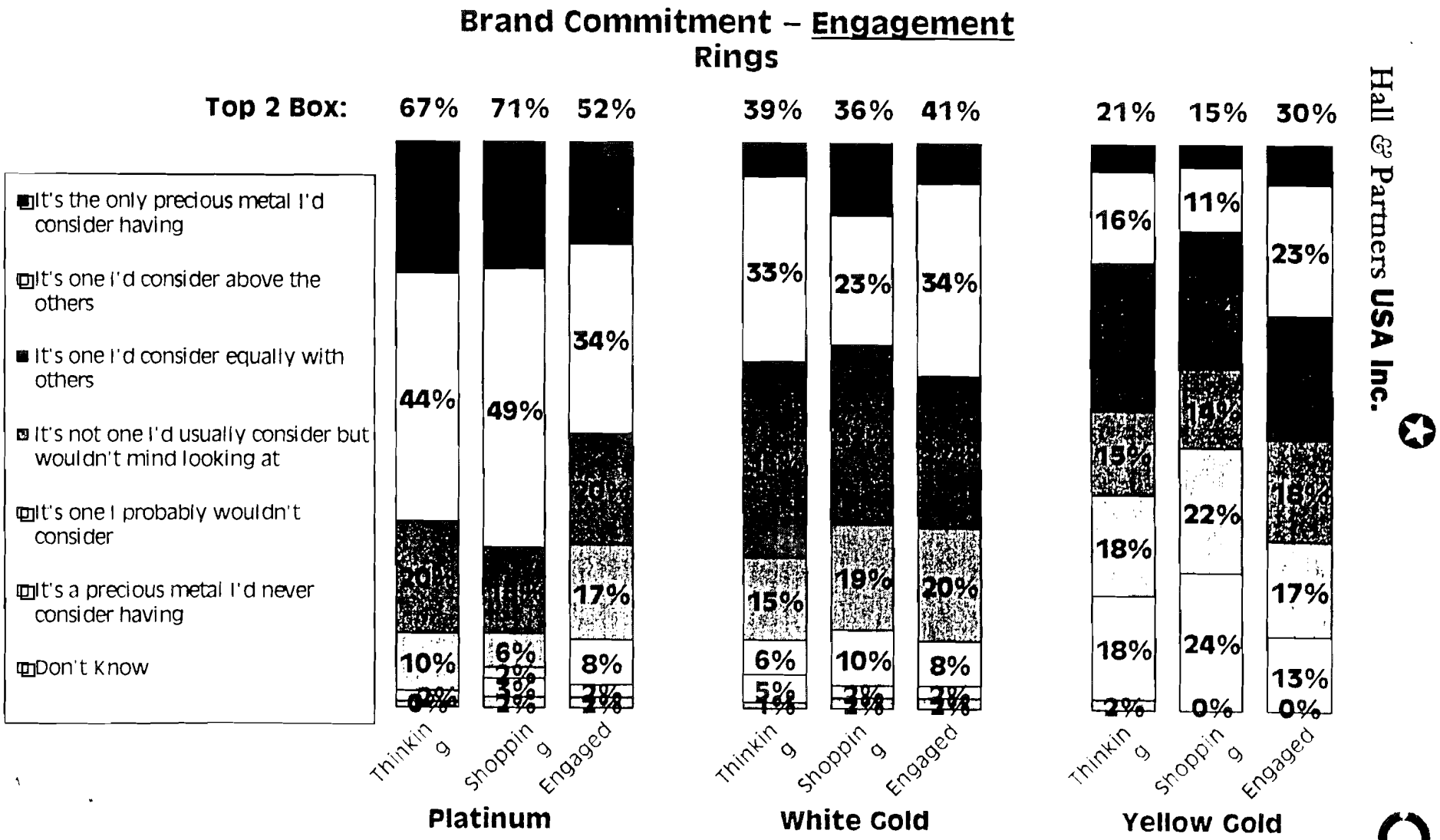
The most precious of all metals

Commitment to Platinum is significantly higher than for other metals – especially when women are in the shopping phase



Base: All Women By Segment (n = 125 for each)
Q8a Thinking about an engagement ring, which of the following phrases best describes how you feel about each of these precious metals?

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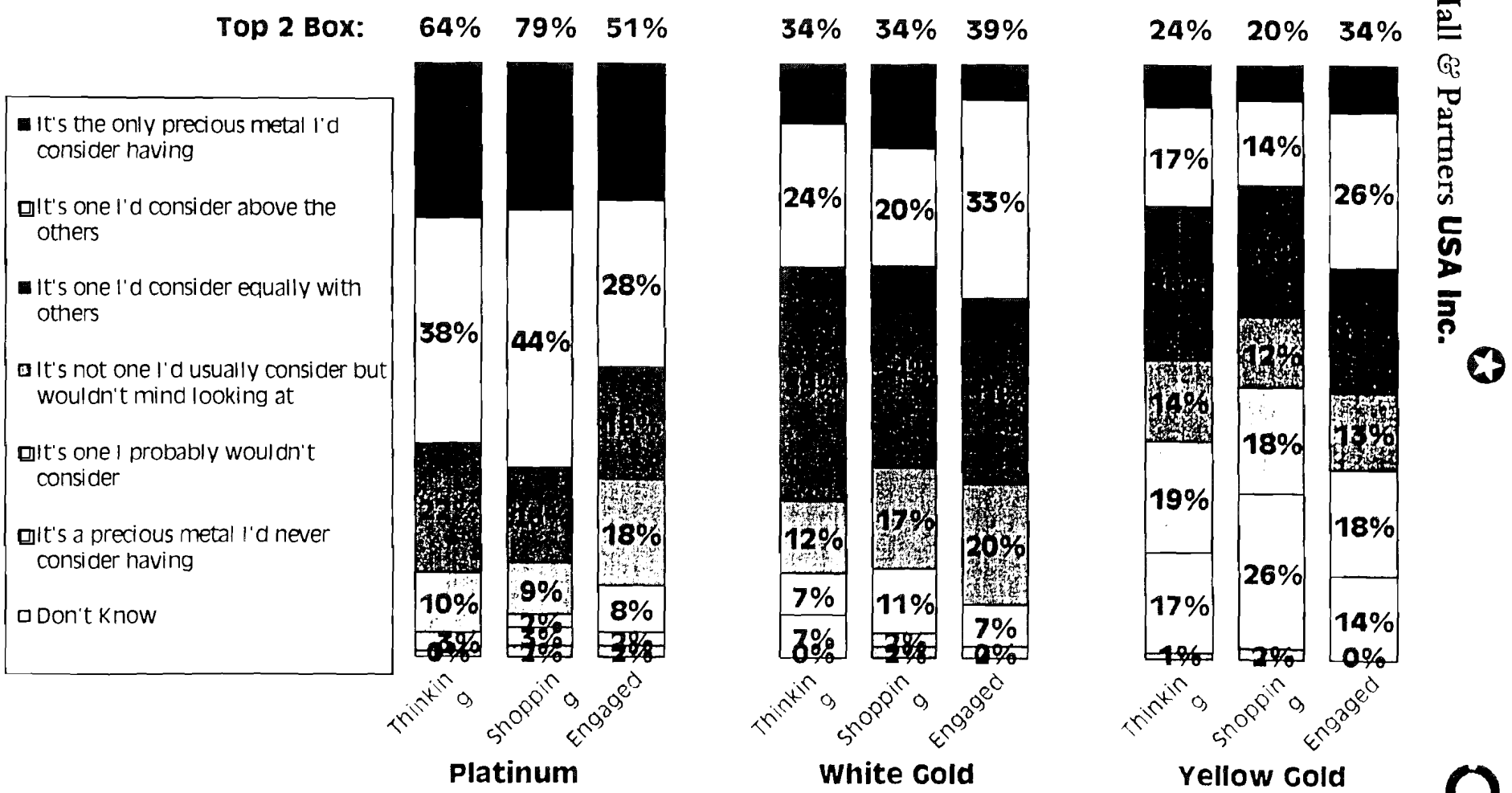
People who are not yet engaged are also more committed to Platinum for their wedding ring.

Brand Commitment – Wedding Rings



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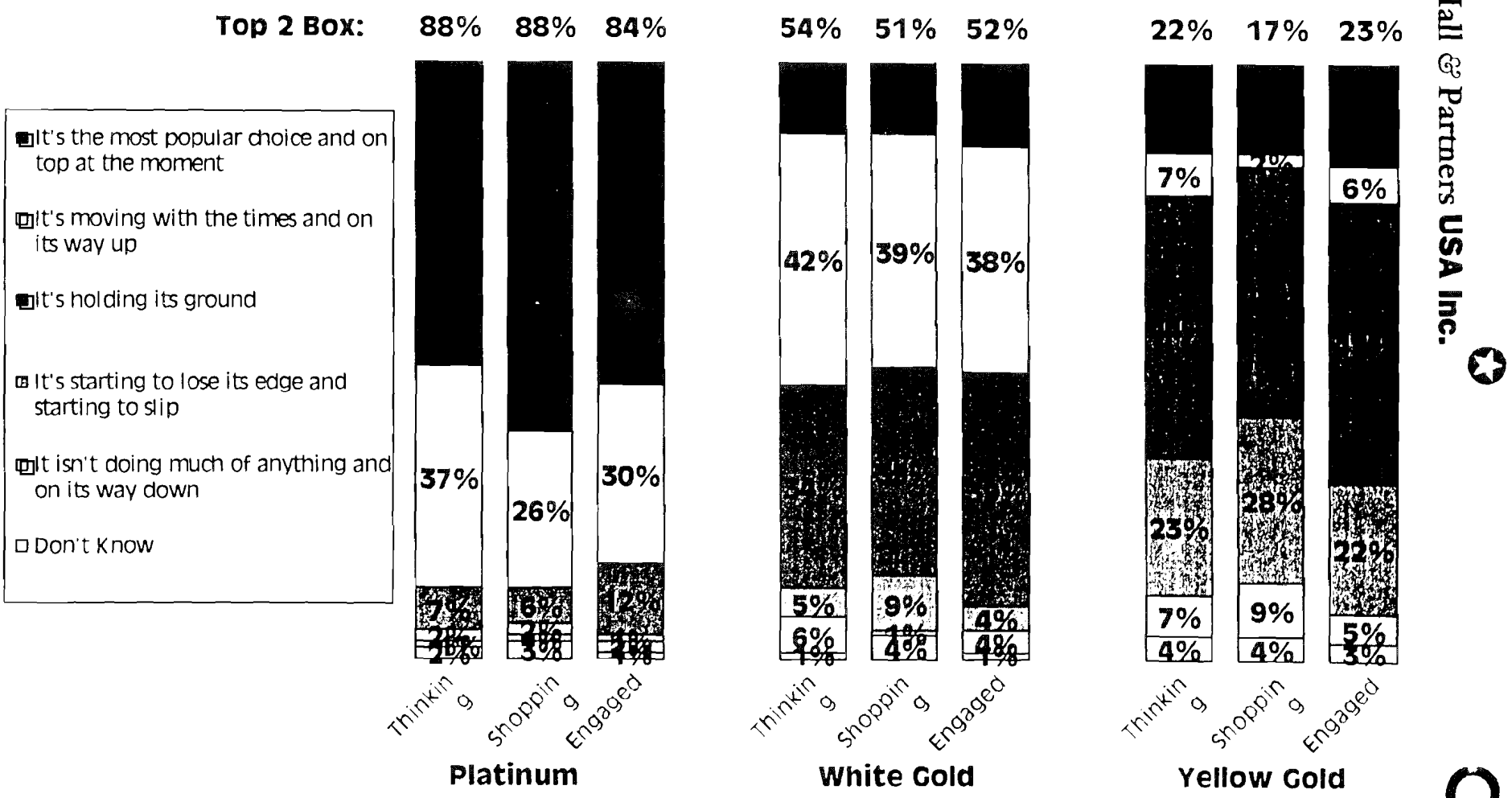
Base: All Women By Segment (n=125 for each)
Q8b Now thinking about your wedding ring, which of the following phrases best describes how you feel about each of these precious metals?

Platinum is clearly seen as the most popular choice...

Brand Salience-Momentum



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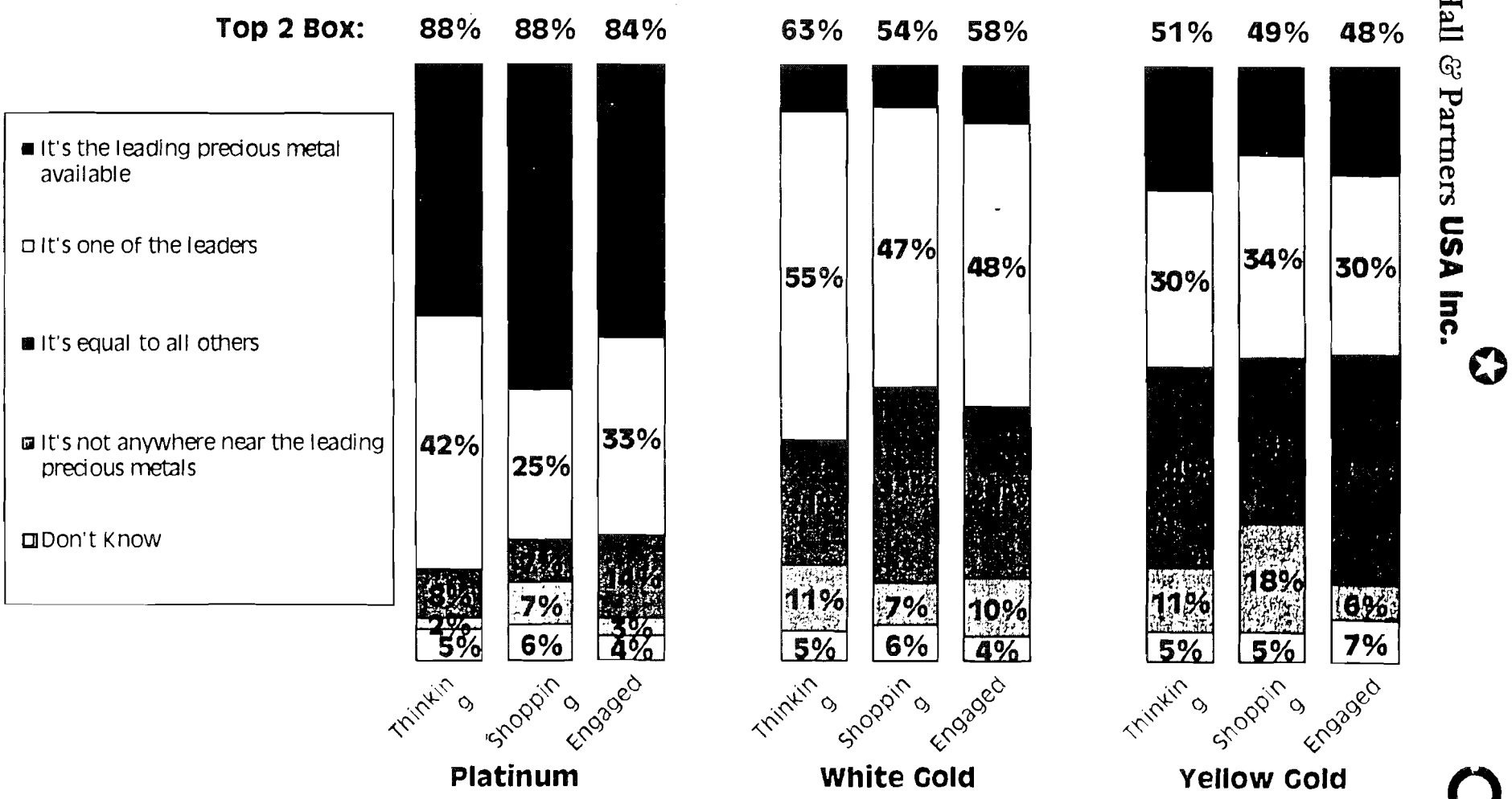
Base: All Women By Segment (n = 125 for each)

10 Now I'd like to know how much you feel each precious metal is growing or declining at the moment. Which of the phrases below best describes how you feel about each precious metal?

...and is considered the leading precious metal available

Brand Salience-Leadership



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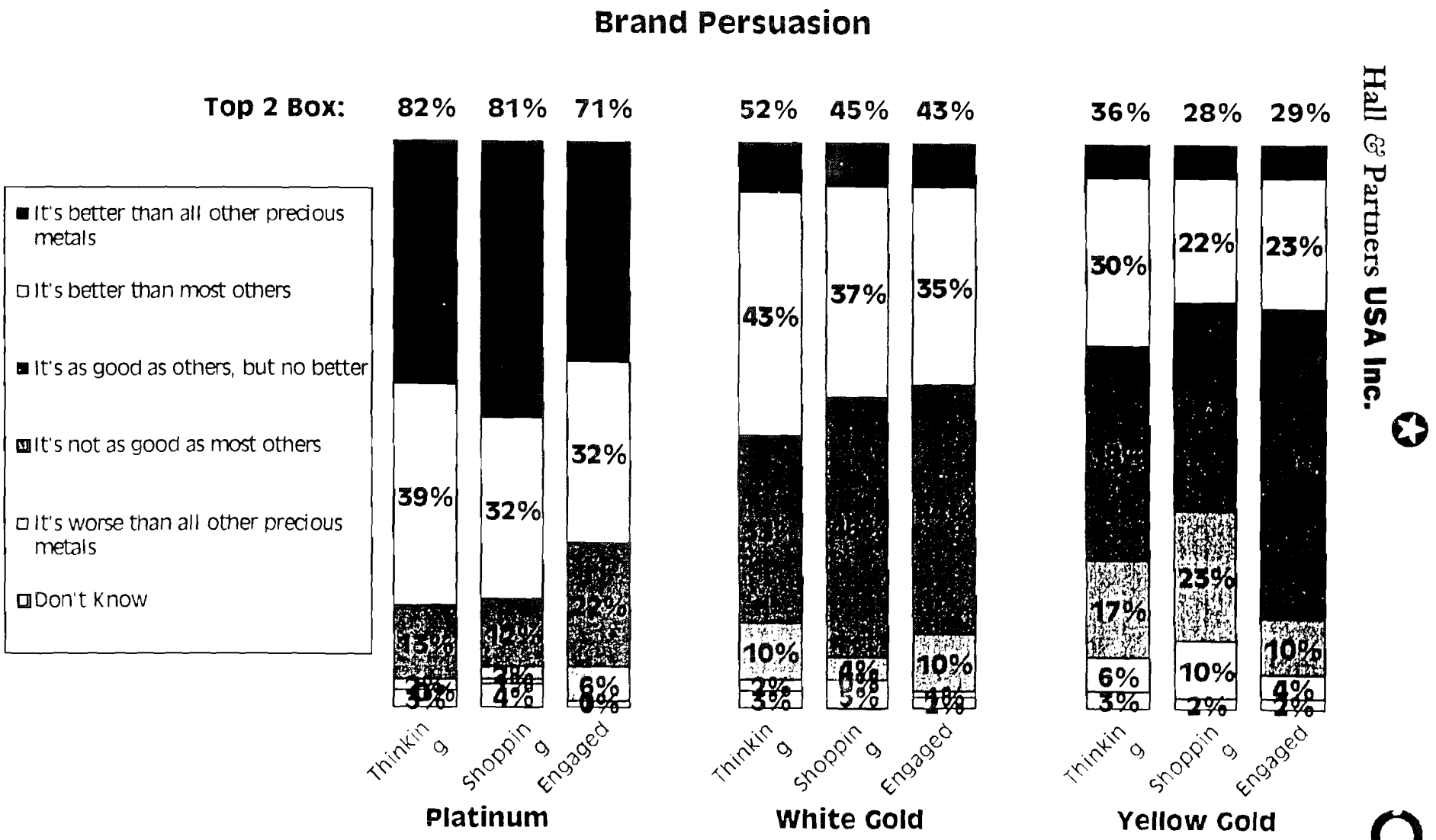
Base: All Women By Segment (n = 125 for each)

Q11 Based on your overall impression of each precious metal, how much do you feel each of these is a leader in the market?

...with all groups feeling that Platinum is functionally superior



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Base: All Women By Segment (n = 125 for each)

Q9 Which of the statements below describes your overall impression of each of the following precious metals?

Platinum is rated very high on all functional levels, however, women who are engaged may not be rating it as highly since it is not what they have

Brand Imagery-Platinum

Gave a rating of 8 or more	Thinking	Shopping	Engaged
Is expensive	85	87	86
It's the highest quality	84	89	81
Is a good investment	78	86	73
Is the strongest you can choose	83	84	72
Will keep looking good over time	83	81	71
Something I would choose if money was no object	82	86	68
It's appropriate for many occasions	80	78	70
It's pure	**78**	**81**	**70**
It's eternal and enduring	**77**	**73**	**66**
Fits my style	77	81	56
It's a rare metal	**74**	**67**	**70**
Is worth paying more for	74	78	58
It's appropriate for different types of jewelry	72	69	66
Hard wearing	64	62	47
It's what everyone I know has or is getting	45	50	39

Pure, Rare and Eternal are coming through strongly

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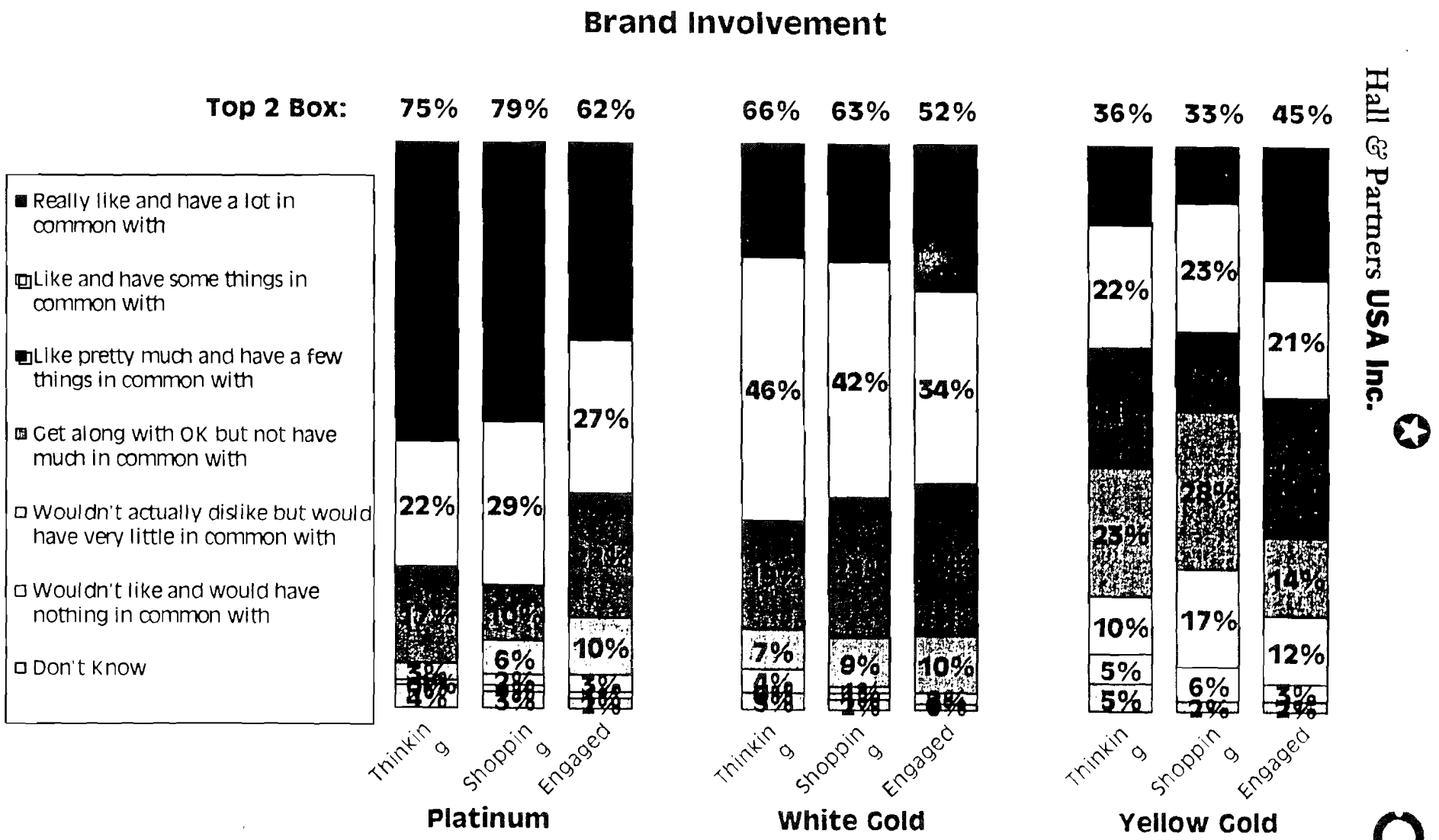
Base: All Women By Segment (n = 125 for each)

Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'it totally applies' and give a score of "1" if you think 'it doesn't apply at all' **SELECT**

Prior to engagement, women are most emotionally attached to Platinum



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Base: All Women By Segment (n = 125 for each)

Q12 Now we'd like you to do something a little different and imagine that these precious metals were to come to life as people. For each of these please indicate which of the statements best describes how close you would feel to him or her?

Platinum is already thought of as strong, modern and elegant. People are beginning to think of it as timeless and distinctive as well, good indicators for the "Pure, Rare, Eternal" positioning.

Brand Personality-Platinum

	Thinking	Shopping	Engaged
	%	%	%
Strong	77	77	74
Modern	74	69	75
Elegant	69	70	59
Stylish	64	69	62
Always in style/Timeless	58	54	44
Distinctive	58	58	54
Genuine	54	58	56
Unique	54	54	65
Popular	50	54	54
Romantic	48	45	44
Trustworthy	38	37	34
Everyday	30	25	19
Warm and inviting	25	22	17
Cool and Distant	22	26	38
Classic	22	31	23
Inaccessible	21	17	19
Sensible	18	18	13
Traditional	10	10	6
Dull and Boring	2	3	4

Base: All Women By Segment (n = 125 for each)

Q13 Still imagining that these precious metals came to life as people, which of the characteristics below do you think describe the sort of person that each would be?

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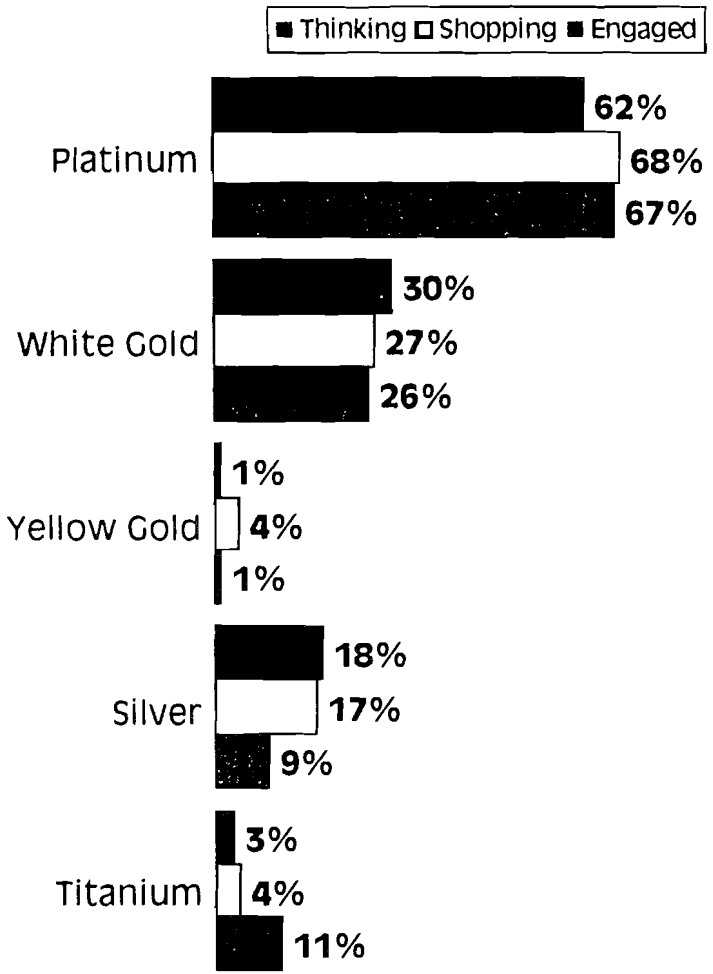
Understanding Men's Relationship with Platinum

Regardless of where men are in the engagement/wedding process, Platinum is top of mind for engagement rings

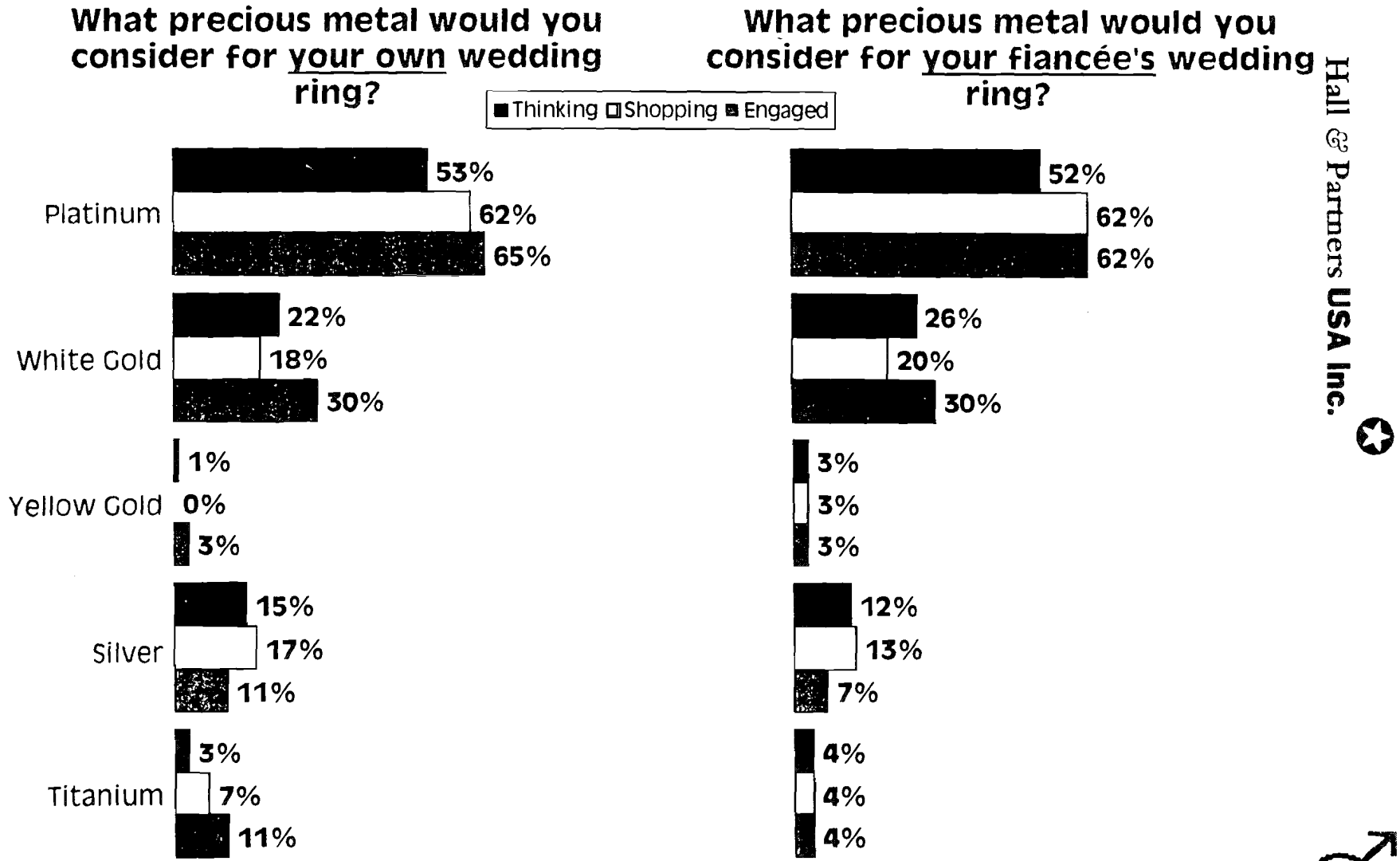
Spontaneous Consideration For Engagement Rings



Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q1 When thinking about **engagement rings**, what precious metals would you consider buying?

And this corresponds with Platinum being the top metal considered for their own and their fiancee's wedding ring



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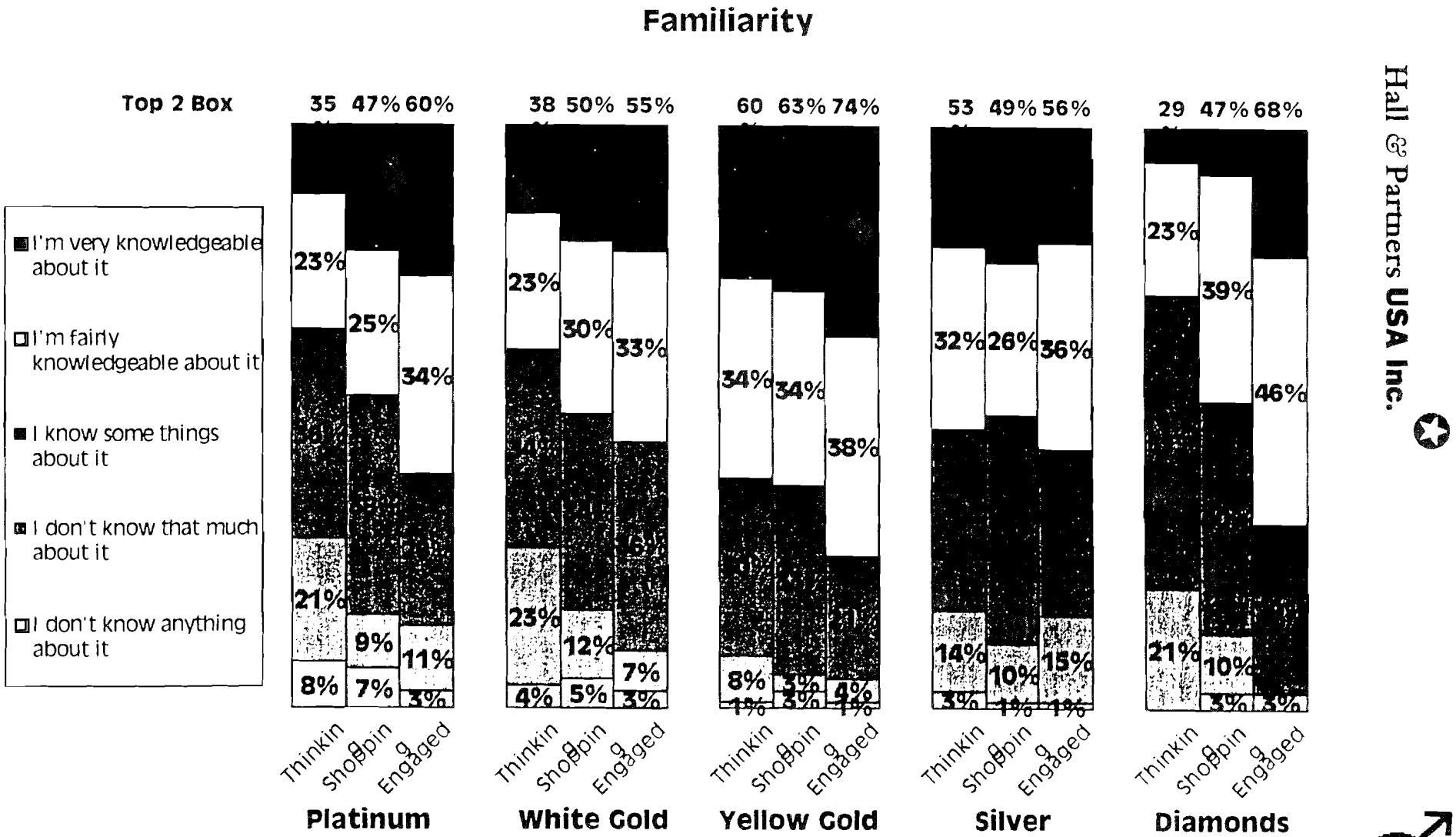
Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q2a Now thinking about **wedding rings**, what precious metal would you consider for **your** wedding ring?

Q2b And, what precious metal would you consider for **your fiancée's** wedding ring?

Not surprisingly, familiarity with precious metals strengthens for men the deeper they are in the engagement/marriage process



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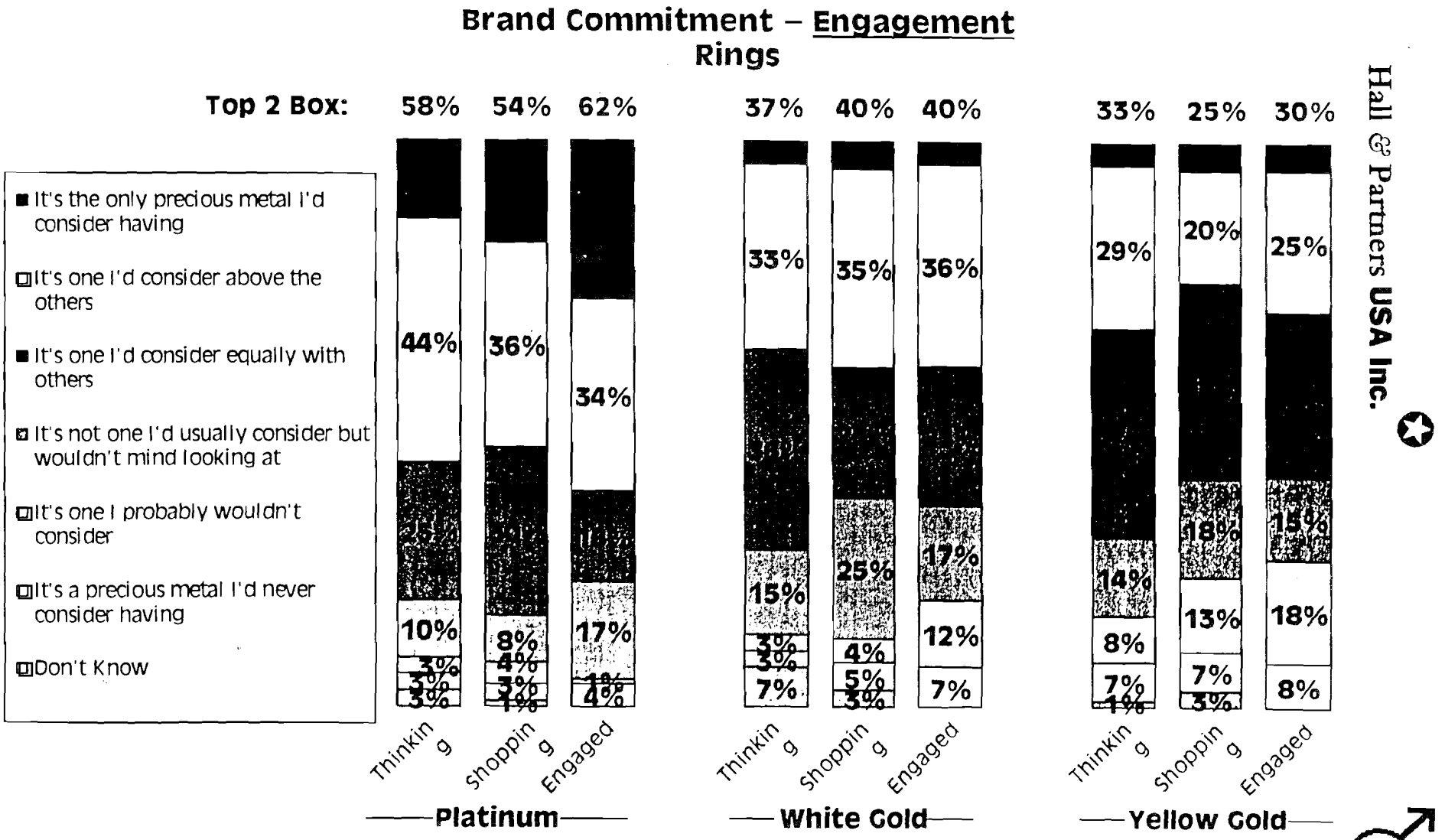
Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q7a Now using the scale below, how much do you know about the following precious metals?

Q7b And, how much do you know about diamonds?

This familiarity translates into the strongest level of consideration of Platinum for engagement rings



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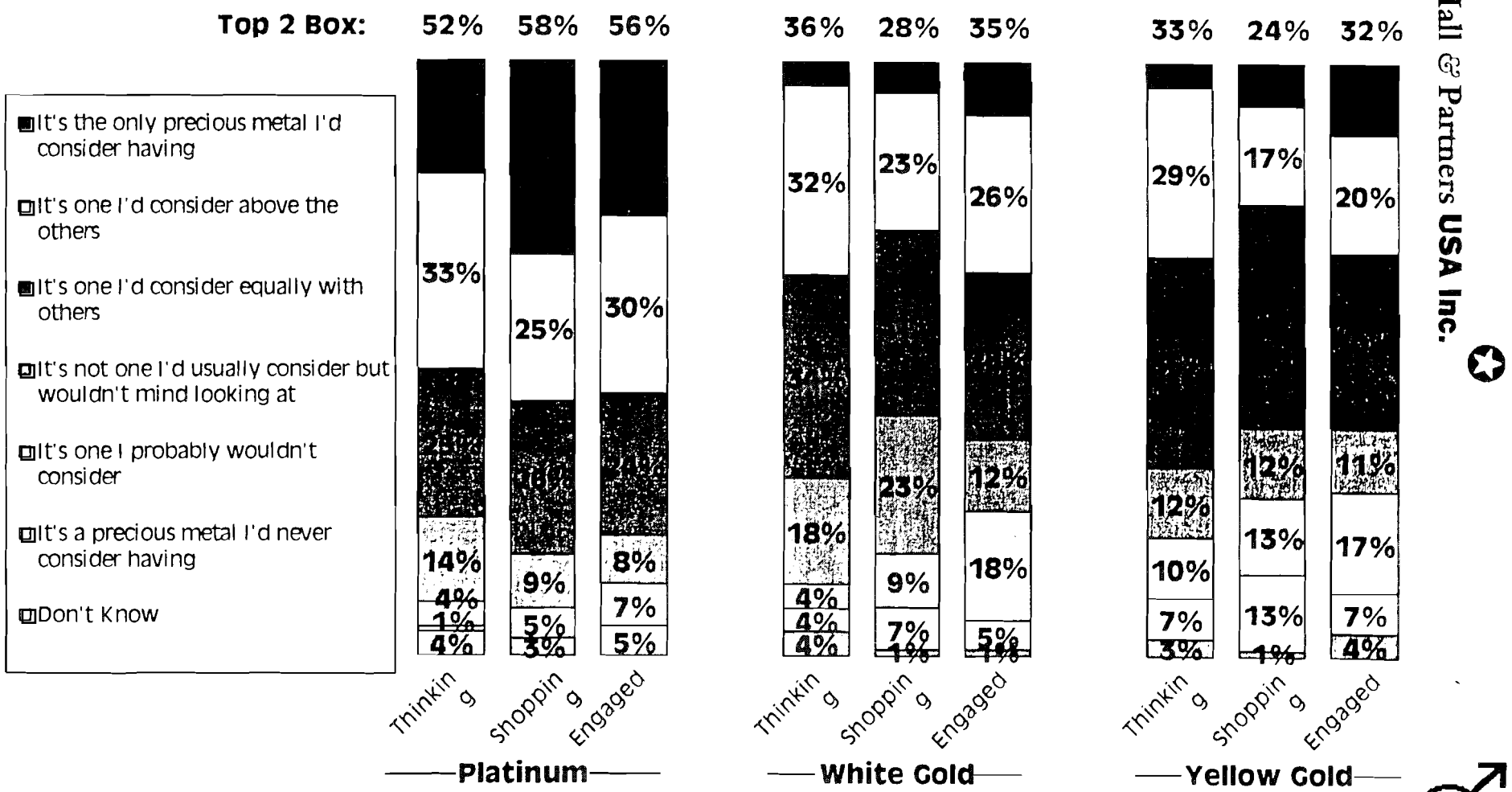
Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q8a Thinking about an engagement ring, which of the following phrases best describes how you feel about each of these precious metals?

...as well as for their wedding rings

Brand Commitment – Wedding Rings



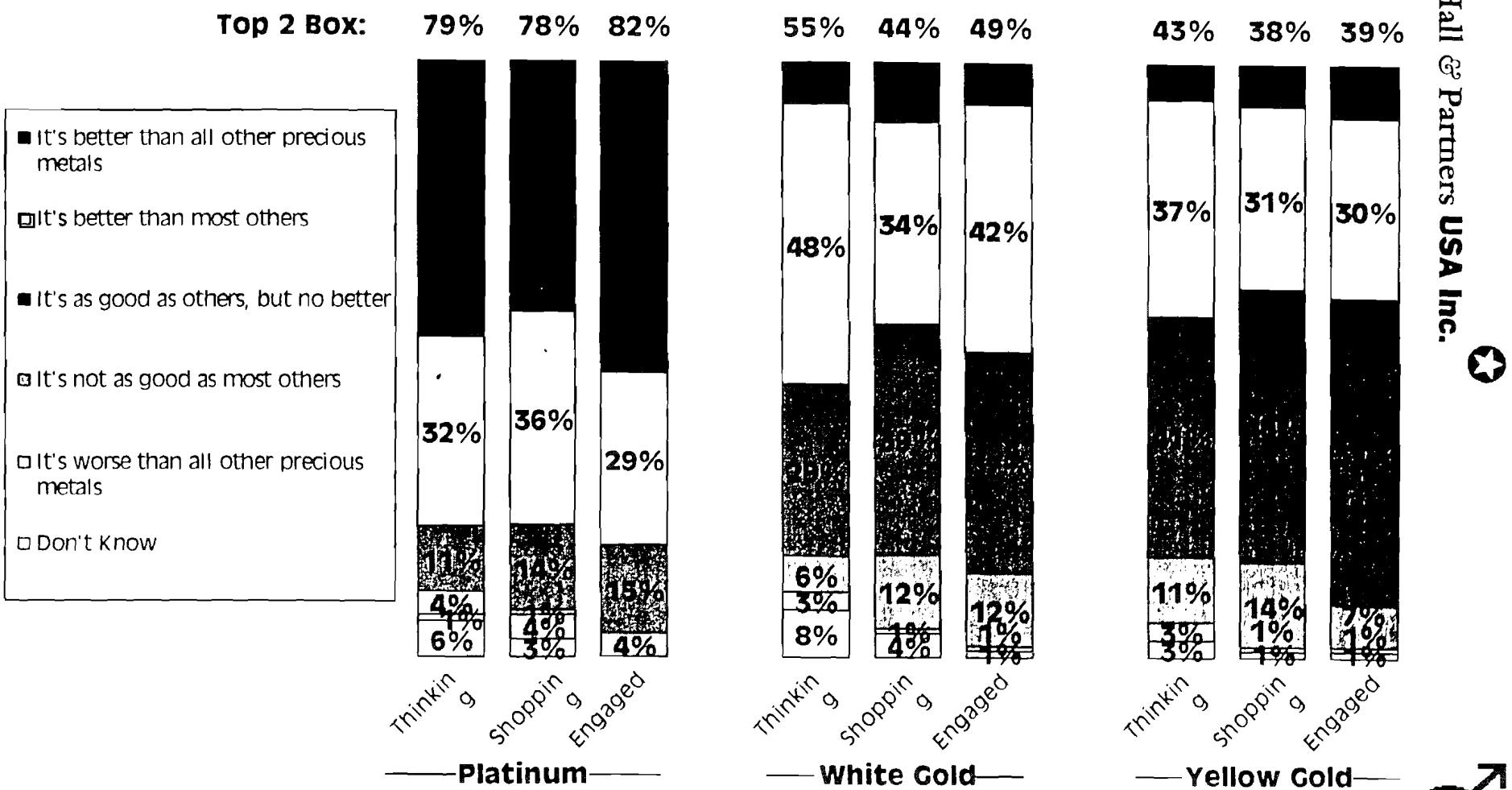
Hall & Partners **USA Inc.**

Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q8b Now thinking about <u>your</u> wedding ring, which of the following phrases best describes how you feel about each of these precious metals?

Men also believe that Platinum is better than all other precious metals

Brand Persuasion



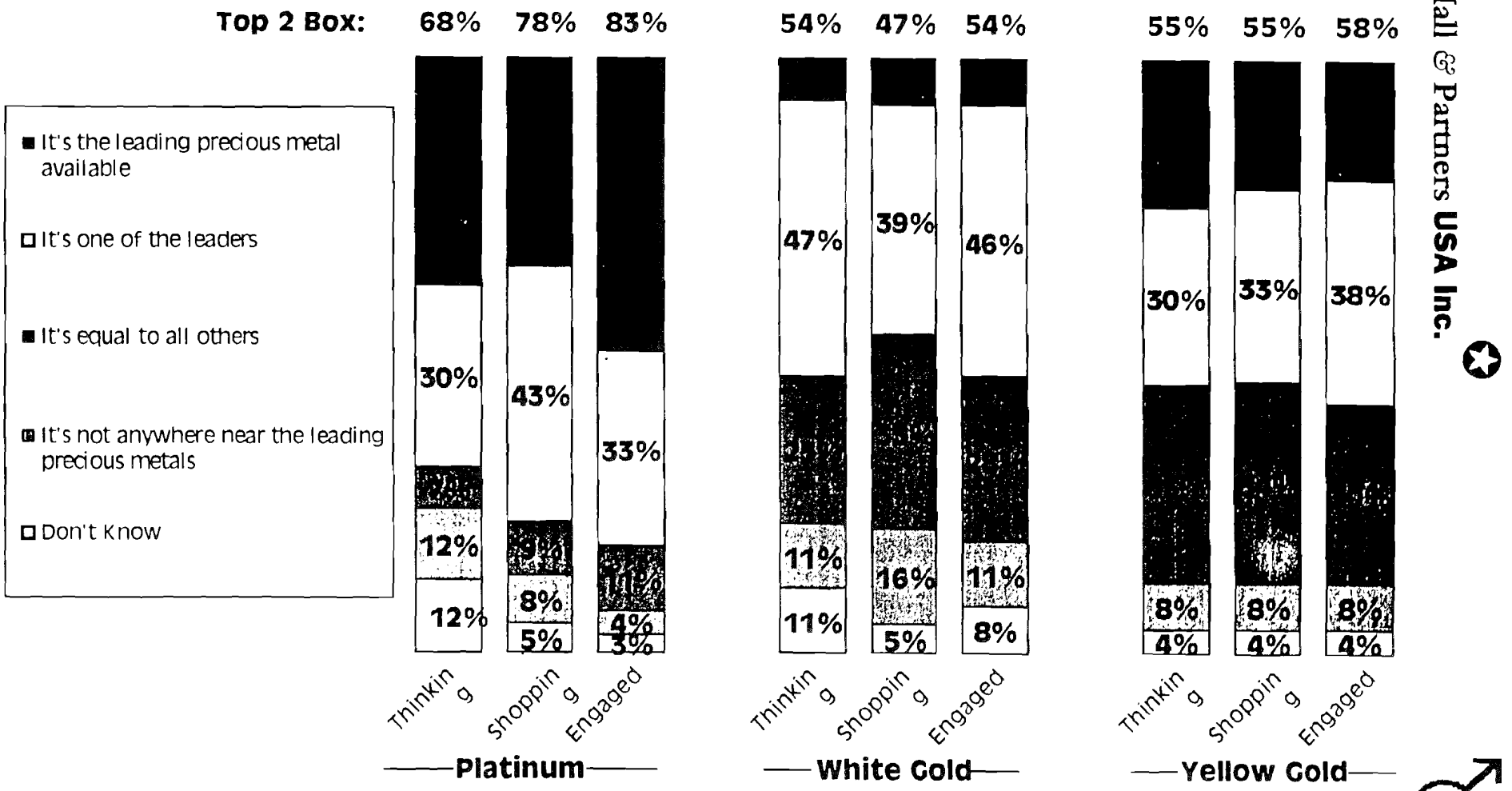
Hall & Partners USA Inc.

Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q9 Which of the statements below describes your overall impression of each of the following precious metals?

...and that Platinum is by far the most leading precious metal

Brand Salience-Leadership



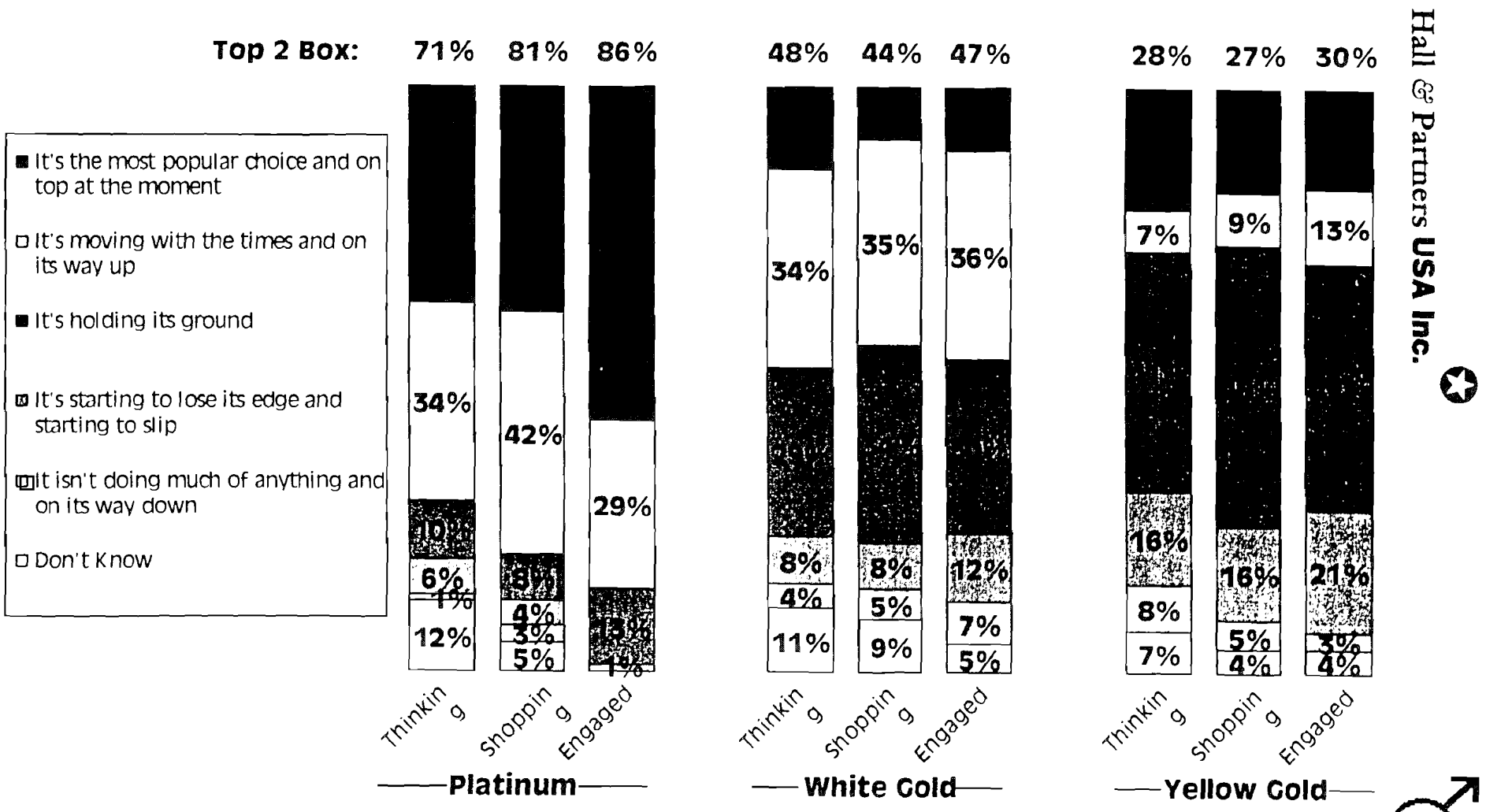
Hall & Partners **USA Inc.**

Base: All Men By Segment (Thinking/Shopping/Engaged) - (73/77/76)

Q11 Based on your overall impression of each precious metal, how much do you feel each of these is a leader in the market?

Platinum is also seen as the 'choice of the moment'

Brand Salience-Momentum



Hall & Partners USA Inc.

Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q10 Now I'd like to know how much you feel each precious metal is growing or declining at the moment. Which of the phrases below best describes how you feel about each precious metal?

Men know that Platinum is high quality, and although they feel it's expensive, it's a good investment

Brand Imagery-Platinum

8 or more	Thinking	Shopping	Engaged
	%	%	%
Is expensive	84	82	87
It's the highest quality	80	87	87
Will keep looking good over time	74	73	79
Is the strongest you can choose	74	74	75
It's pure	**73**	**70**	**78**
Something I would choose if money was no object	71 →	74 →	83
Fits my style	64	68	70
It's a rare metal	**64** →	**69** →	**78**
Is a good investment	62 →	71 →	72
It's eternal and enduring	**62**	**62**	**66**
It's appropriate for different types of jewelry	62	58	67
Is worth paying more for	58	60	58
It's appropriate for many occasions	58	55	65
Hard wearing	33 →	35 →	53
It's what everyone I know has or is getting	29 →	30 →	45

Pure, Rare and Eternal are coming through as well

Hall & Partners **USA Inc.**

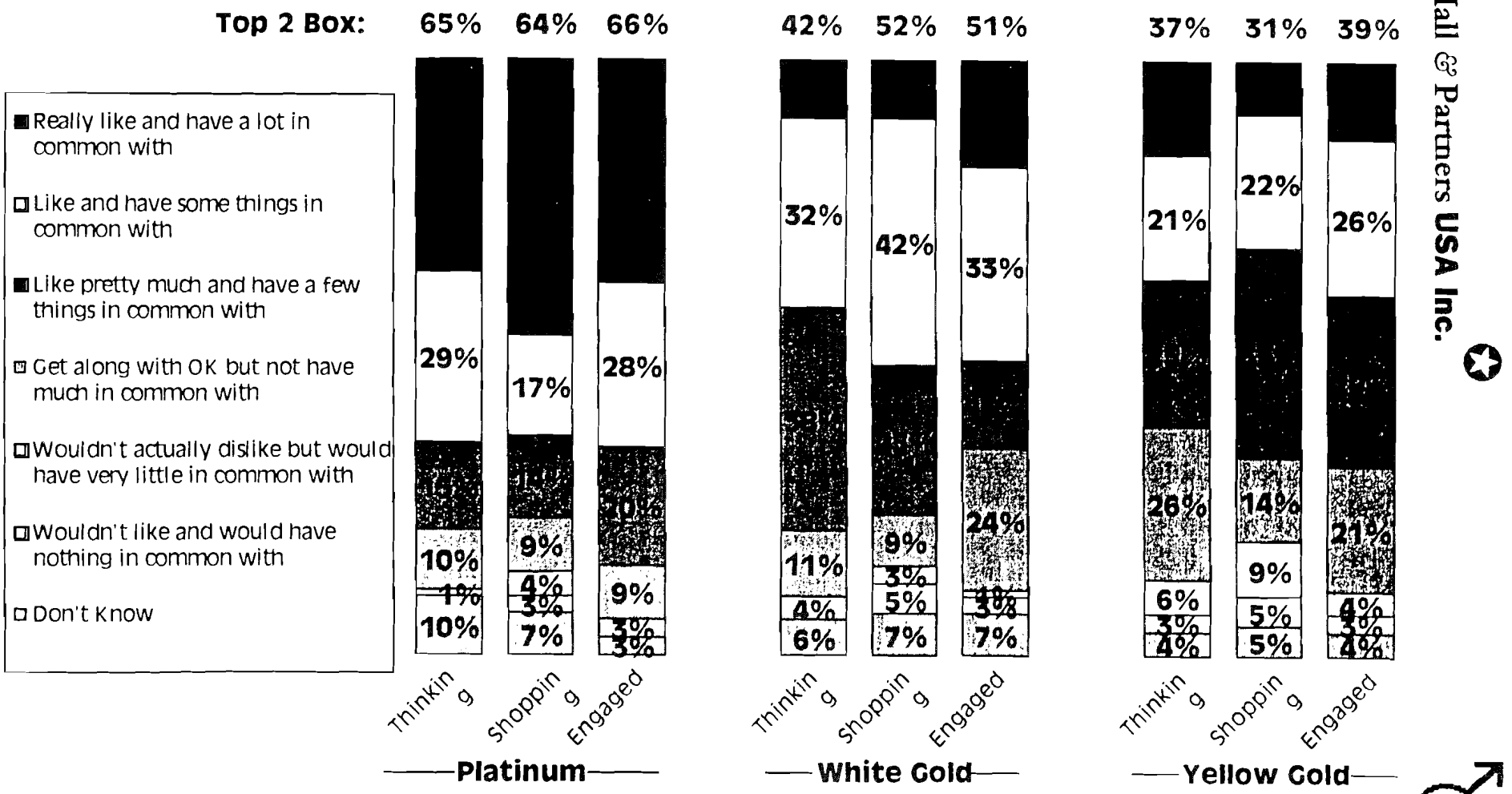
Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'it totally applies' and give a score of "1" if you think 'it doesn't apply at all' **SELECT**

The most precious of all metals

...and has values that people identify with

Brand Involvement



Hall & Partners **USA Inc.**

Base: All Men By Segment (Thinking/Shopping/Engaged) - (73/77/76)

Q12 Now we'd like you to do something a little different and imagine that these precious metals were to come to life as people. For each of these please indicate which of the statements best describes how close you would feel to him or her?

Most think of Platinum as being strong, modern, elegant, stylish

Brand Personality-Platinum

	Thinking	Shopping	Engaged
Modern	69	74	70
Strong	66	73	72
Stylish	60	64	68
Genuine	56	58	51
Unique	56 →	68	63
Distinctive	55	56	62
Elegant	53	49	53
Popular	40	34 →	54
Always in style/Timeless	36 →	39 →	42
Romantic	32 →	36 →	43
Cool and Distant	26	34	26
Trustworthy	25	21	24
Inaccessible	21	21	26
Everyday	19	16	20
Warm and inviting	12	13	13
Classic	11	10	18
Sensible	7	13	13
Dull and Boring	6	7	5
Traditional	4	5	13

Hall & Partners **USA Inc.**

Base: All Men By Segment (Thinking/Shopping/Engaged) – (73/77/76)

Q13 Still imagining that these precious metals came to life as people, which of the characteristics below do you think describe the sort of person tha each would be?

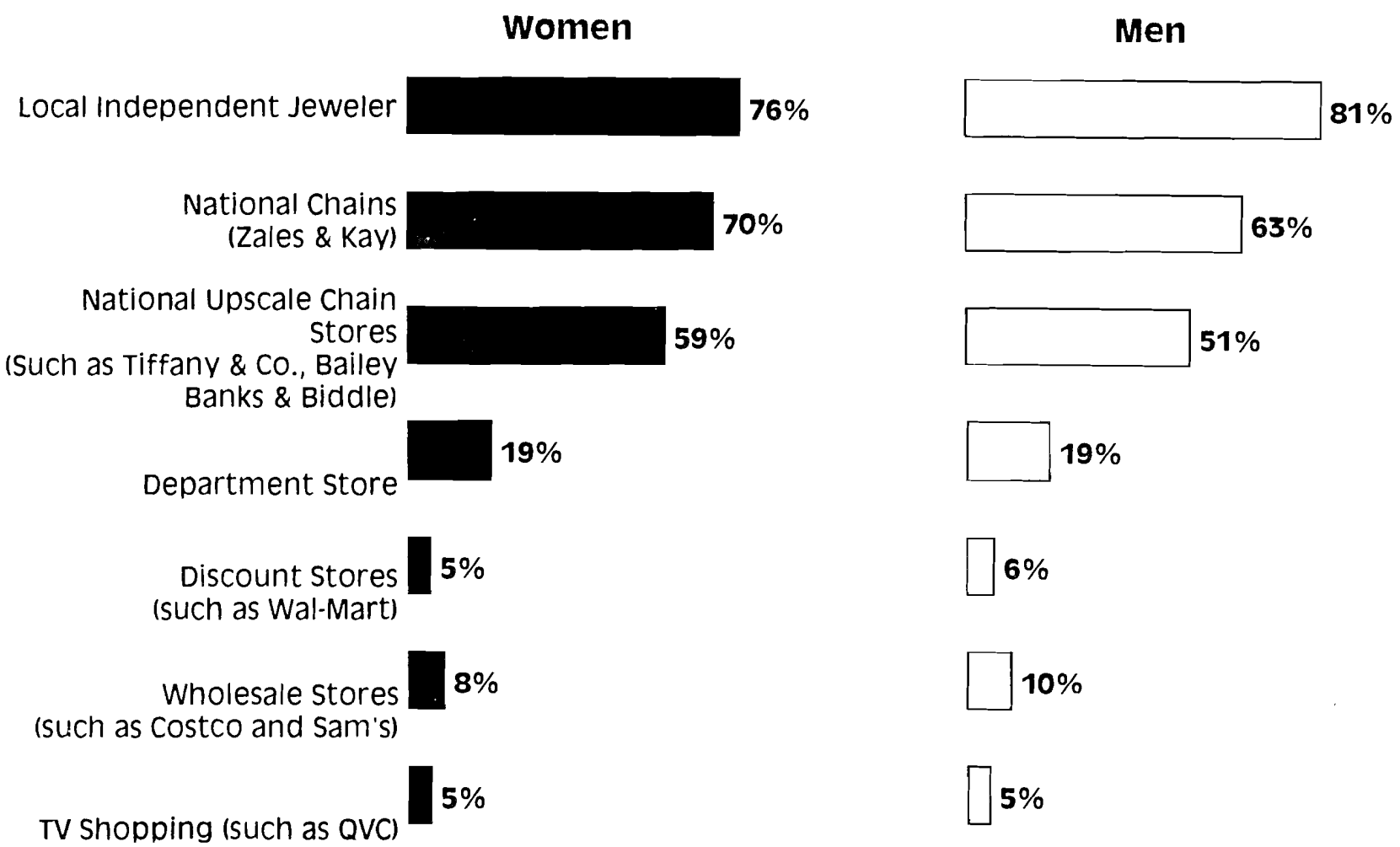
What are people's shopping patterns?

&

How do they find out about Platinum?

Local jewelers and national chains are the most popular places to shop for engagement rings

Places people would shop for an engagement ring

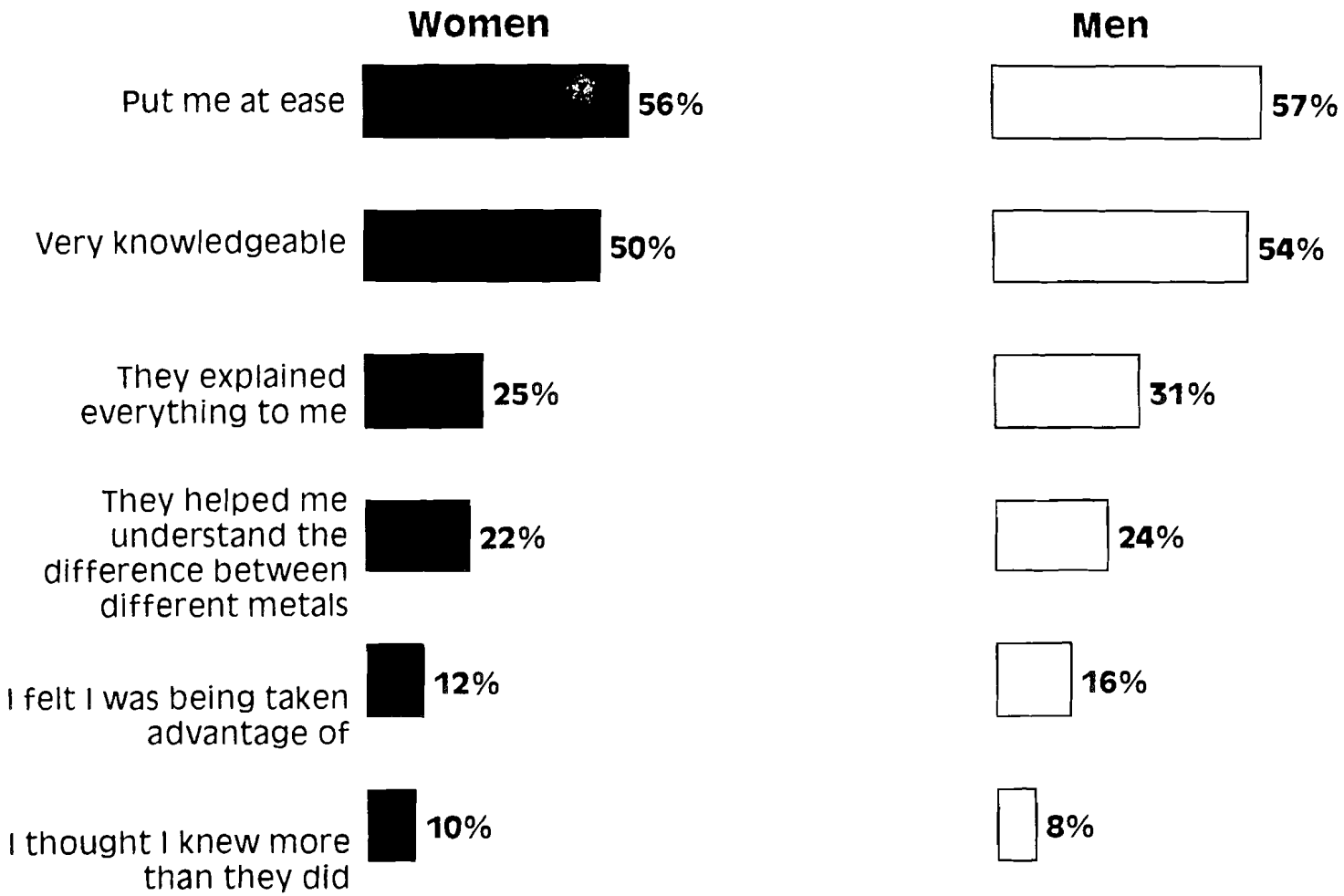


Base: All Respondents Male (226) vs. Female (375)

QB1 Which of the following stores would you or your fiancée shop at for an engagement ring?

Nearly half the people felt the staff were knowledgeable and put them at ease

How knowledgeable and helpful was the staff where they shopped?



Base: All Respondents that have started shopping or are engaged Male (250) vs. Female (153)

QB2 Based on all you shopping experiences so far, which of the following phrases best describes in general how helpful and knowledgeable the staff was?

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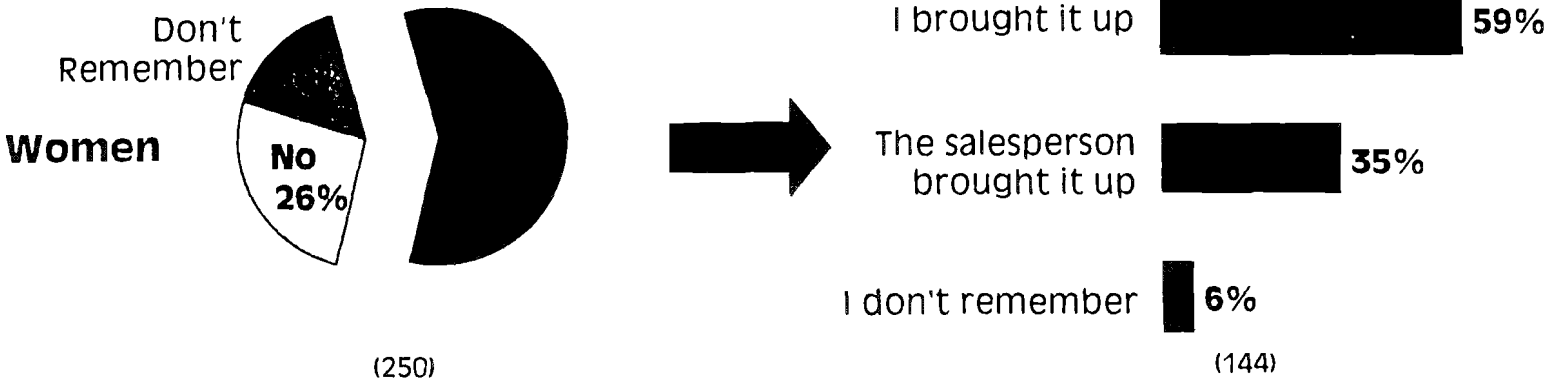
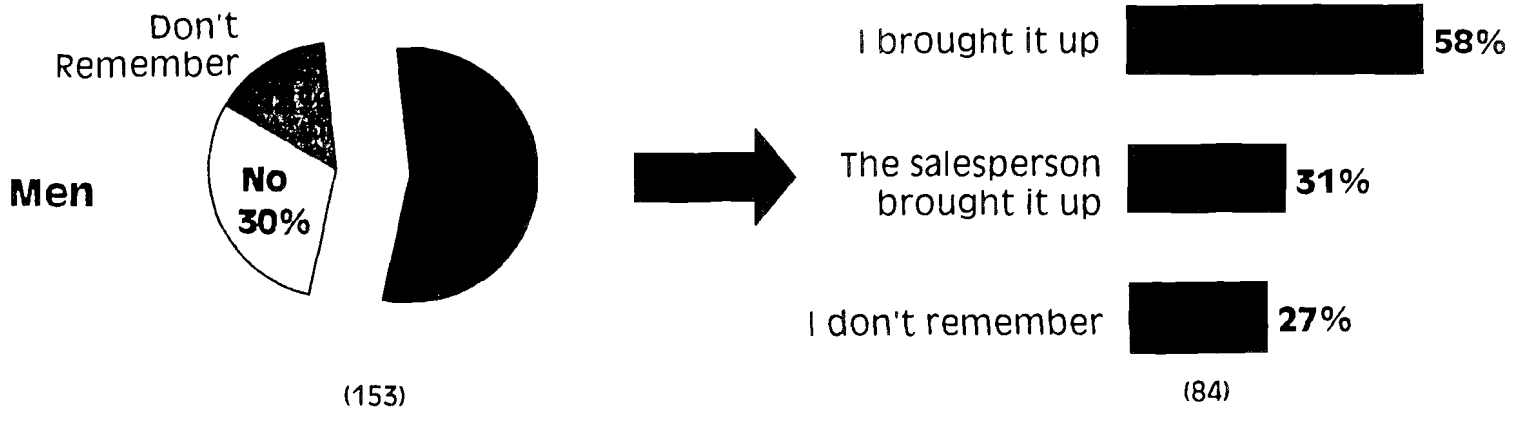
Among the people who talked about Platinum, over half brought up the subject themselves

Did you speak to the salesperson about Platinum?

Who brought up the topic of Platinum?





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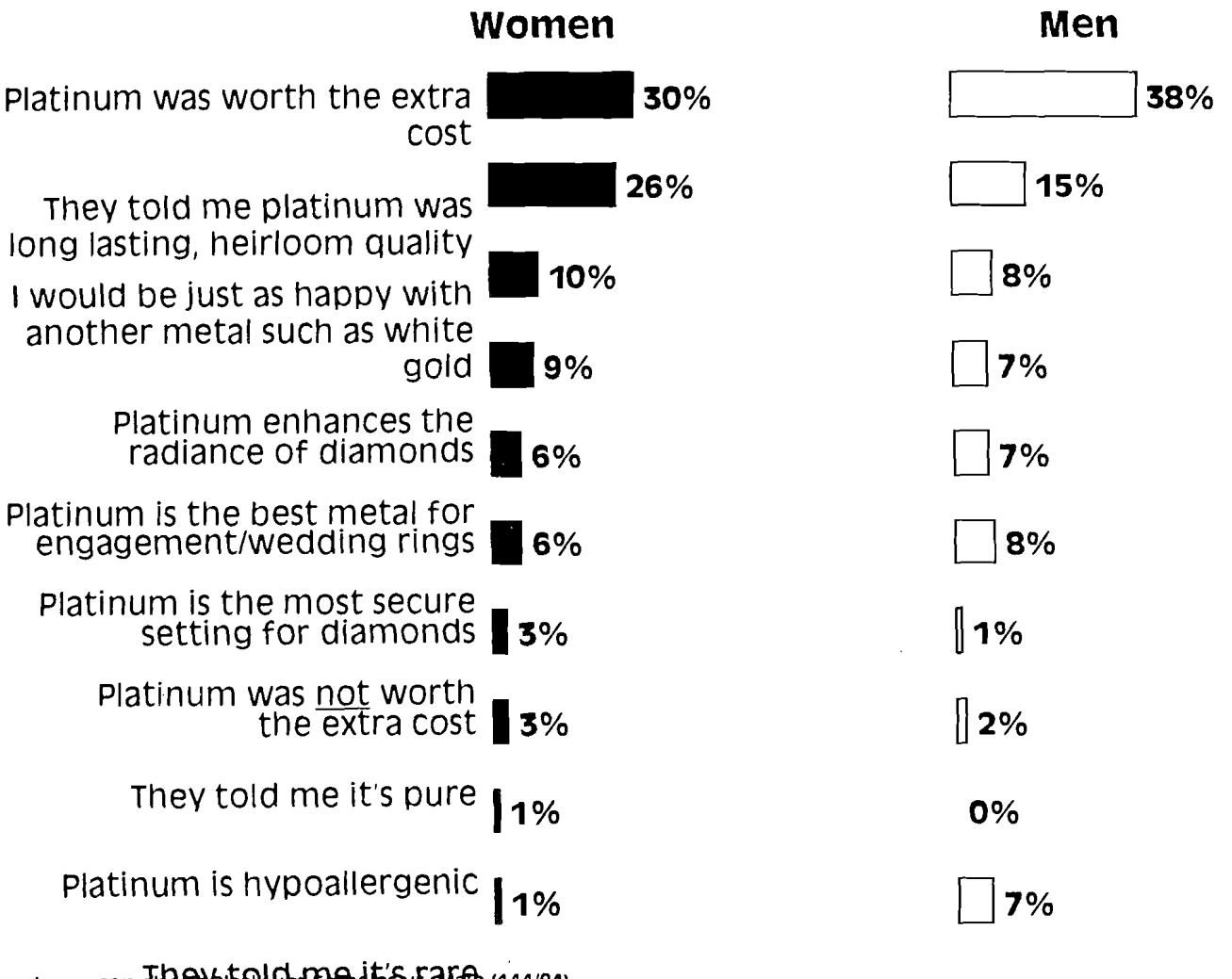
Base: All Respondents that have started shopping or are to engaged/Spoke to salesperson about Platinum Female vs. Male

QB3 Did the sales person talk to you specifically about platinum as an option for your ring?

QB4 When you spoke to the sales person about platinum did you bring it up or did they?

About one third of the staff said Platinum was worth the extra cost, the main reason being it's long lasting

What did the store staff tell you about Platinum?

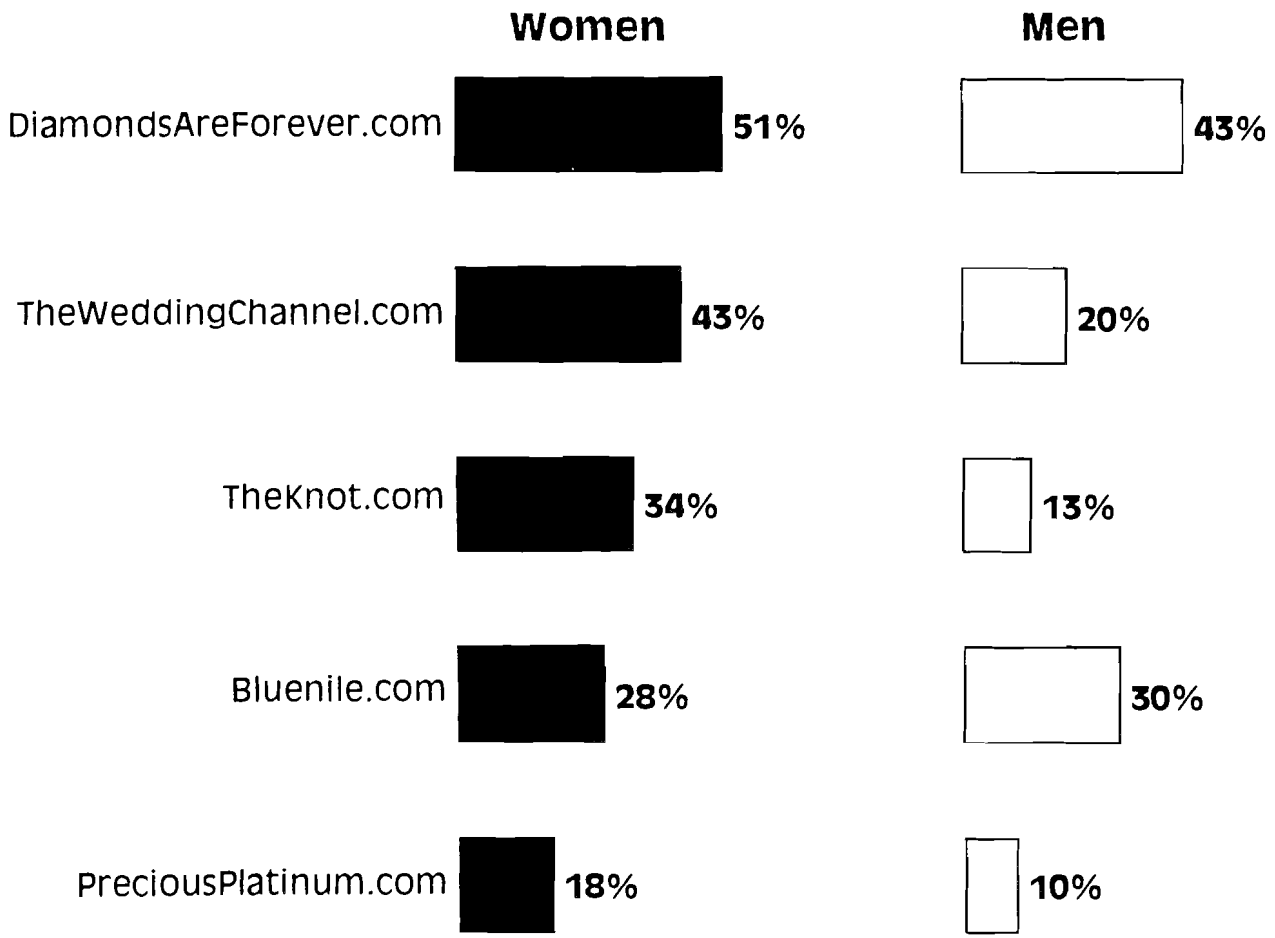


Base: Spoke to salesperson about Platinum Females vs. Male (144/84)

QB5: Which of the following statements best describes what they told you about Platinum?

DiamondsAreForever.com is the most popular site; TheWeddingChannel.com also playing a role for women

What websites have you visited to find out more about Platinum?

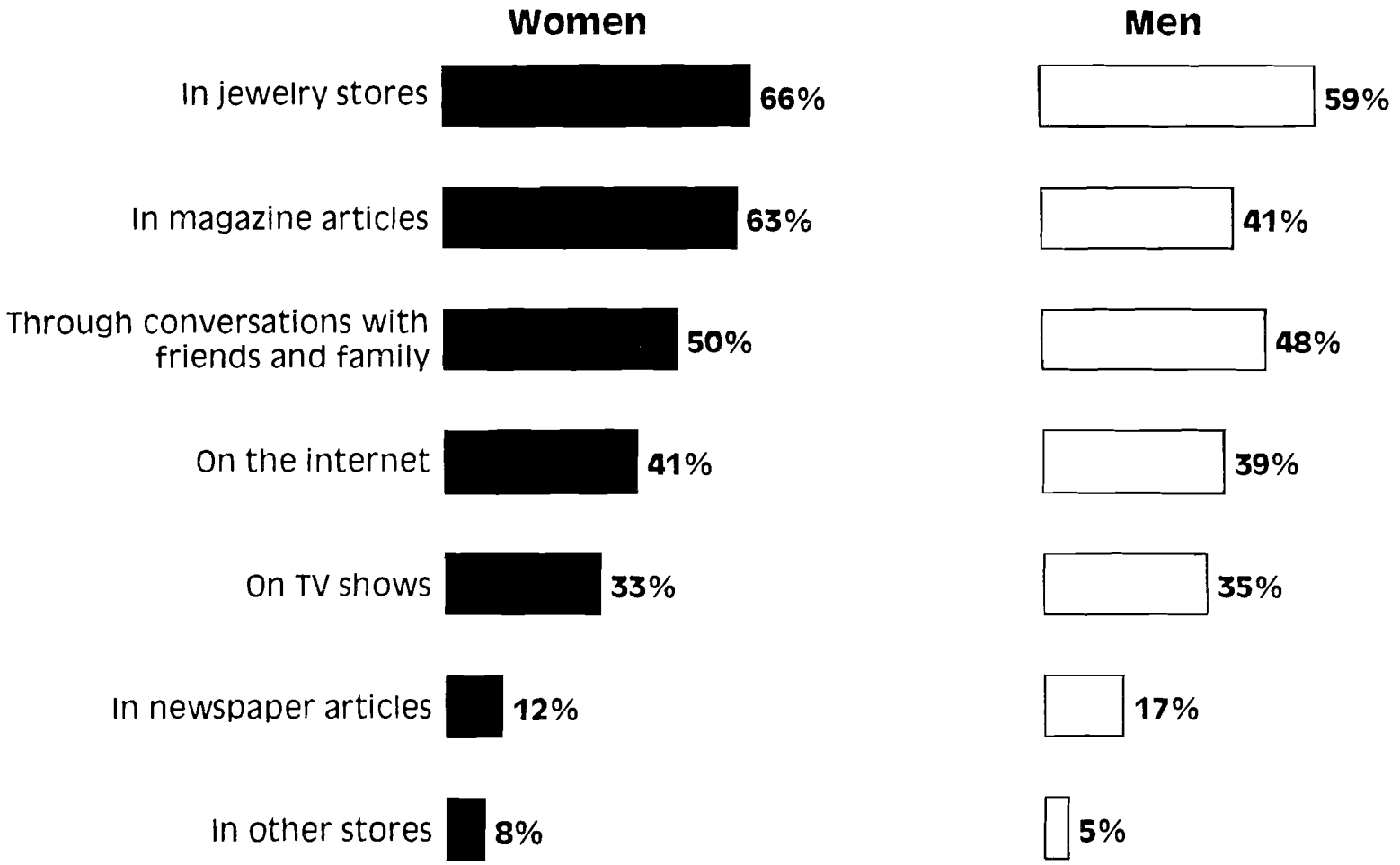


Base: All Respondents Male (226) vs. Female (375)
QB8 Which of the following websites have you ever visited to find out about jewelry?

Magazines play a larger role for women in telling them about Platinum

How do people know about Platinum?

"Where have you seen or heard about Platinum?"



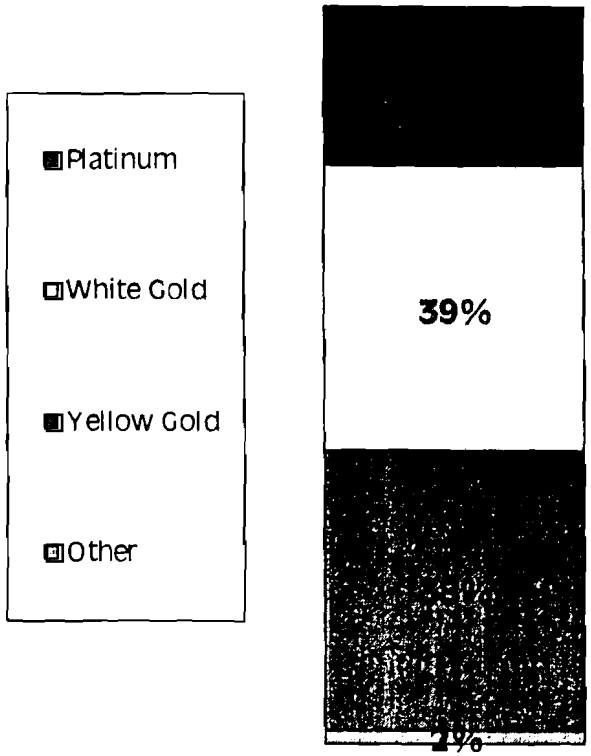
Base: All Respondents Male (226) vs. Female (375)

QB7 In which of the following areas have you seen or heard anything about platinum?

How do perceptions evolve once women receive their engagement ring?

Among engaged women interviewed the majority do not own platinum engagement rings

What is your engagement ring made of?



Base: All Women that are engaged with a ring (125)
QB6 You said earlier that you already have an engagement ring. Which of the following precious metals is the ring made of?

Platinum owners have slightly higher income and a higher rate of full time employment

Profiles of people that own different types of

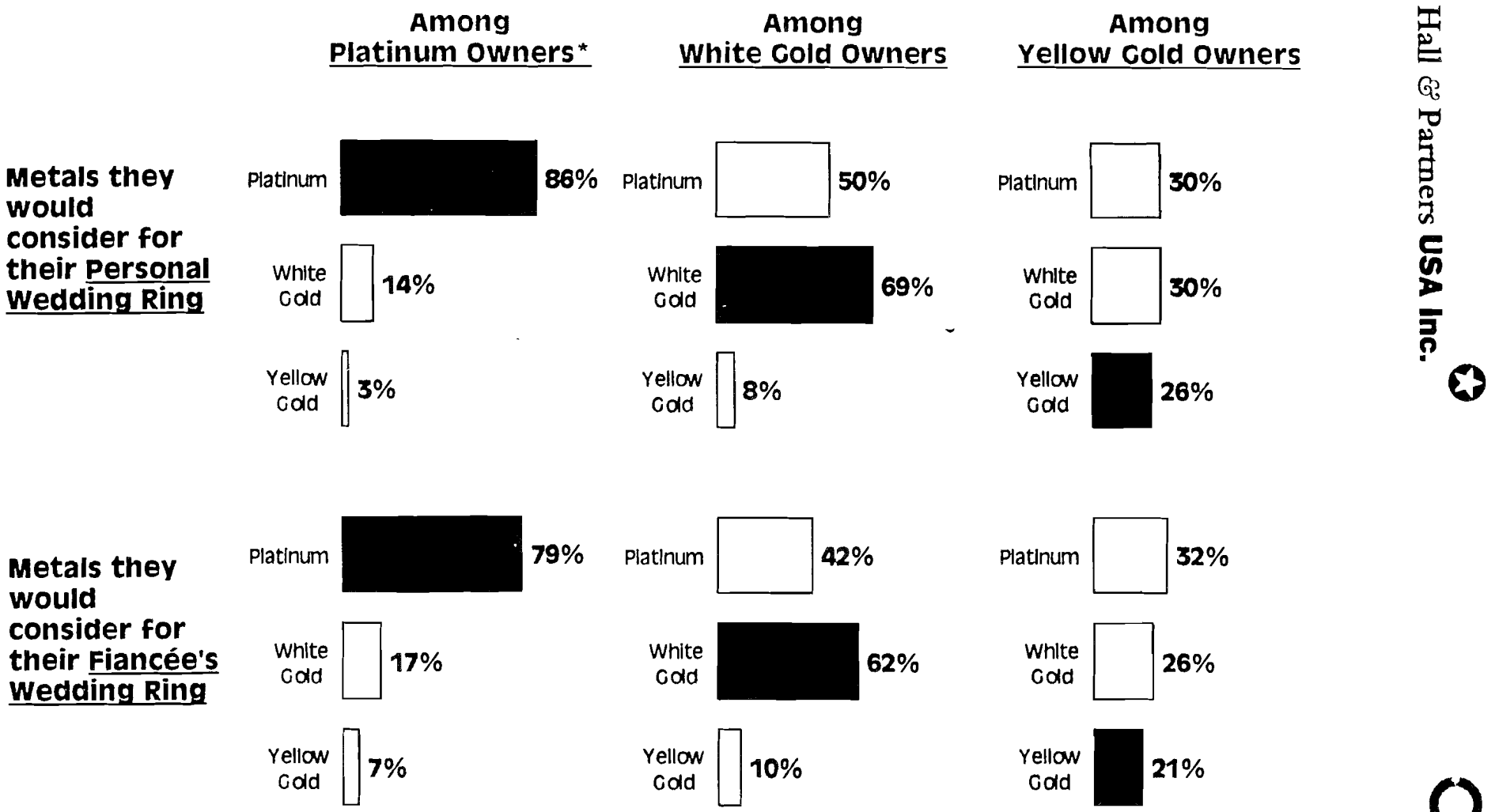
	Platinum Rings Owners	White Gold Owners	Yellow Gold Owners
Average Age	24.3	24.6	24.4
Income			
30,000-39,999	38	35	51
40,000-49,999	28	48	21
50,000-74,999	31	10	17
75,000-99,999	0	6	11
100,000+	3	2	0
Education			
Some College	24	37	62
Completed College	69	44	28
Post graduate	7	19	11
Race/Ethnicity			
Caucasian/White	79	83	68
African American/Black	7	6	6
Hispanic	0	6	13
Asian/Pacific Islander	14	2	9
American Indian	0	2	4
Employment Status			
Employed, Full Time	86	79	72
Employed, Part Time	14	8	23
Not Employed	0	10	4

Base: All Women – Own Platinum (29)*, Own White Gold (52), Own Yellow Gold (47)

*CAUTION VERY SMALL BASE SIZE

Platinum owners are more fanatical in terms of only considering Platinum for their wedding ring; White Gold Owners still considering Platinum

Consideration of metals for Wedding Ring *(among diffrent metal owners)*



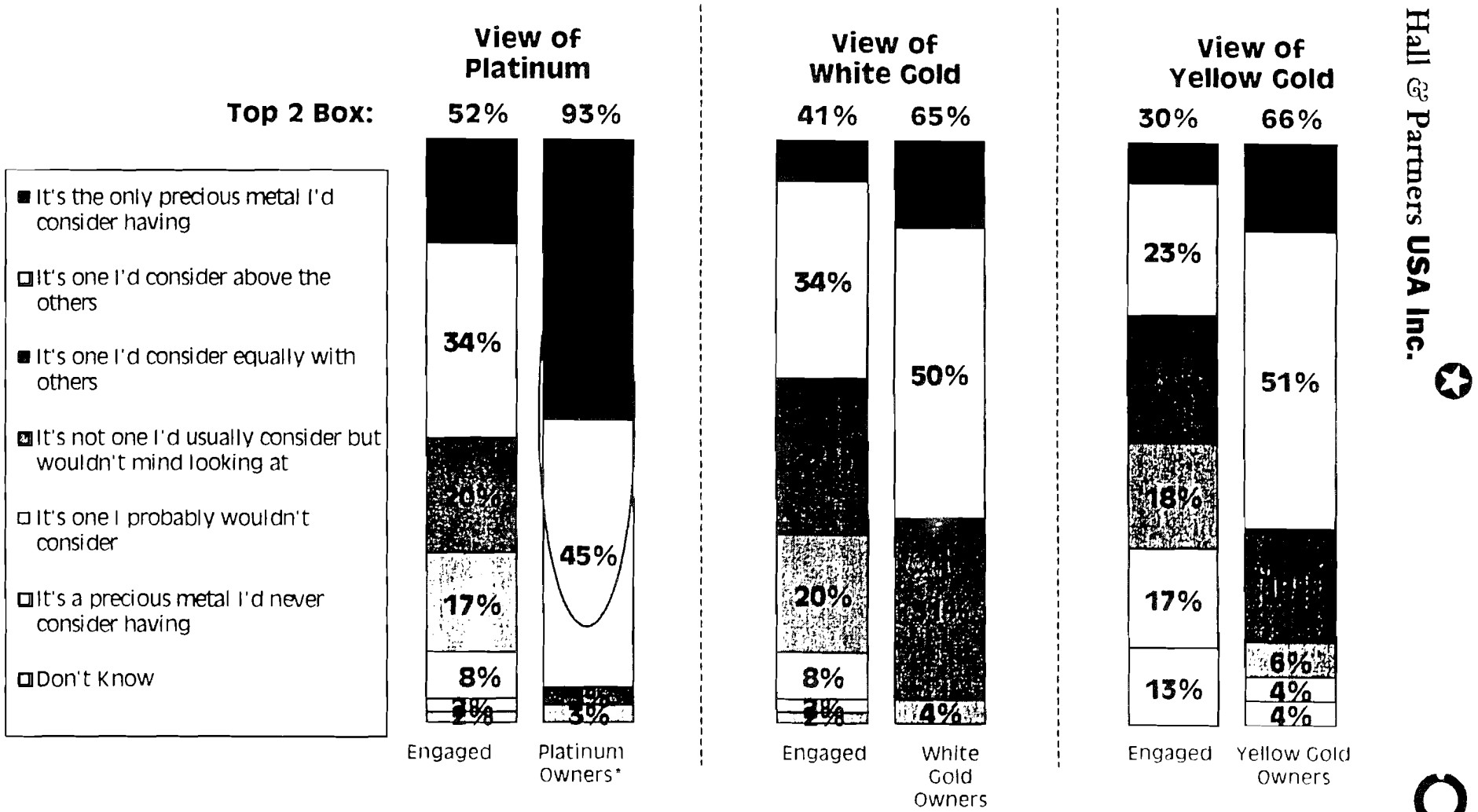
Base: All Women – Own Platinum (29)*, Own White Gold (52), Own Yellow Gold (47)

Q2 When thinking about **wedding rings**, what precious metals would you consider buying?

*CAUTION VERY SMALL BASE SIZE

Owners of Platinum are much more committed to their decision compared to owners of other metals

Commitment to metals they currently own- Engagement Rings



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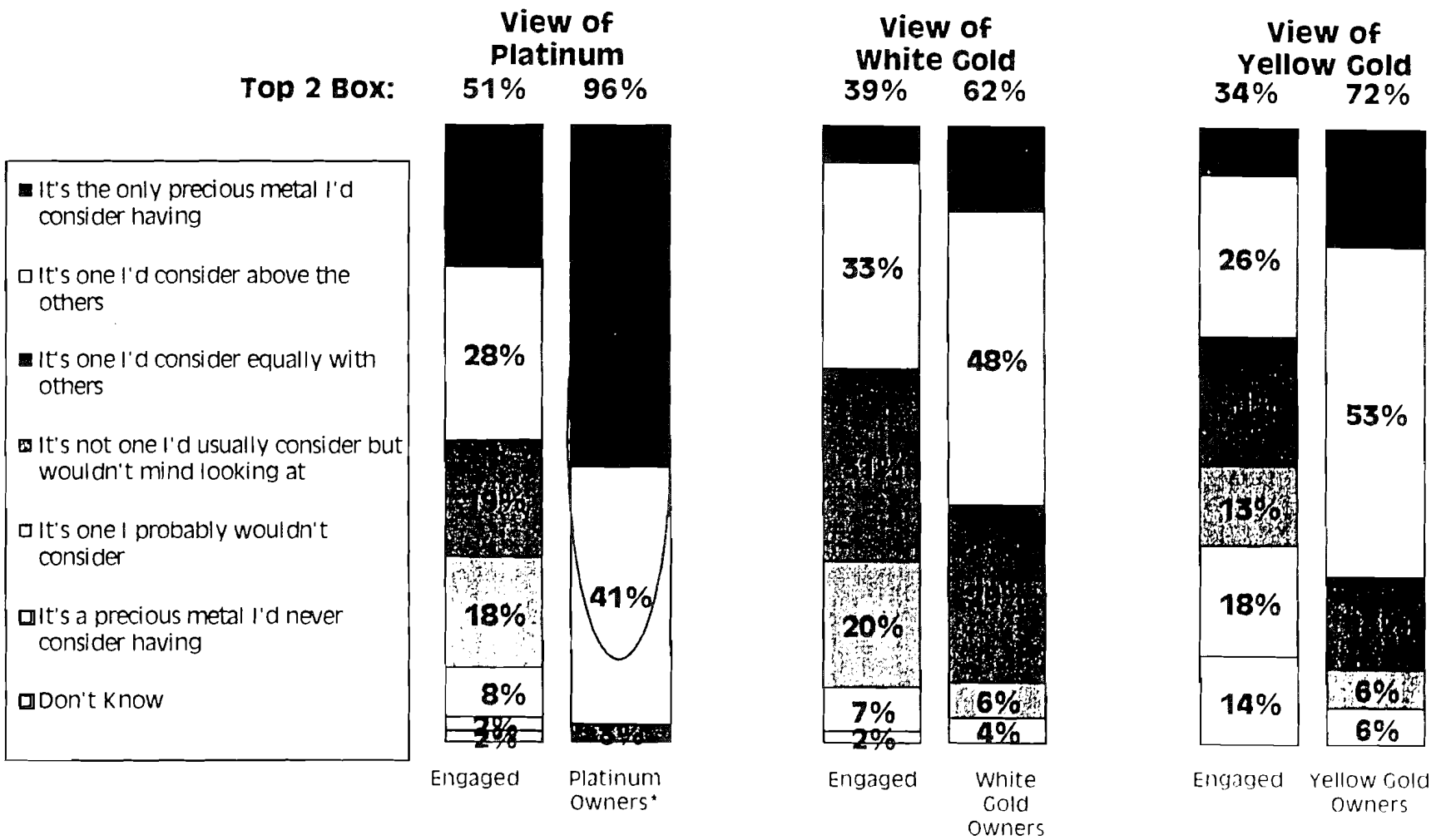
Base: All Women – Engaged (125), Own Platinum (29)*, Own White Gold (52), Own Yellow Gold (47)

Q8a Thinking about an engagement ring, which of the following phrases best describes how you feel about each of these precious metals?

*CAUTION VERY SMALL BASE SIZE

This is true for wedding rings as well

Commitment to metals they currently own- Wedding Rings

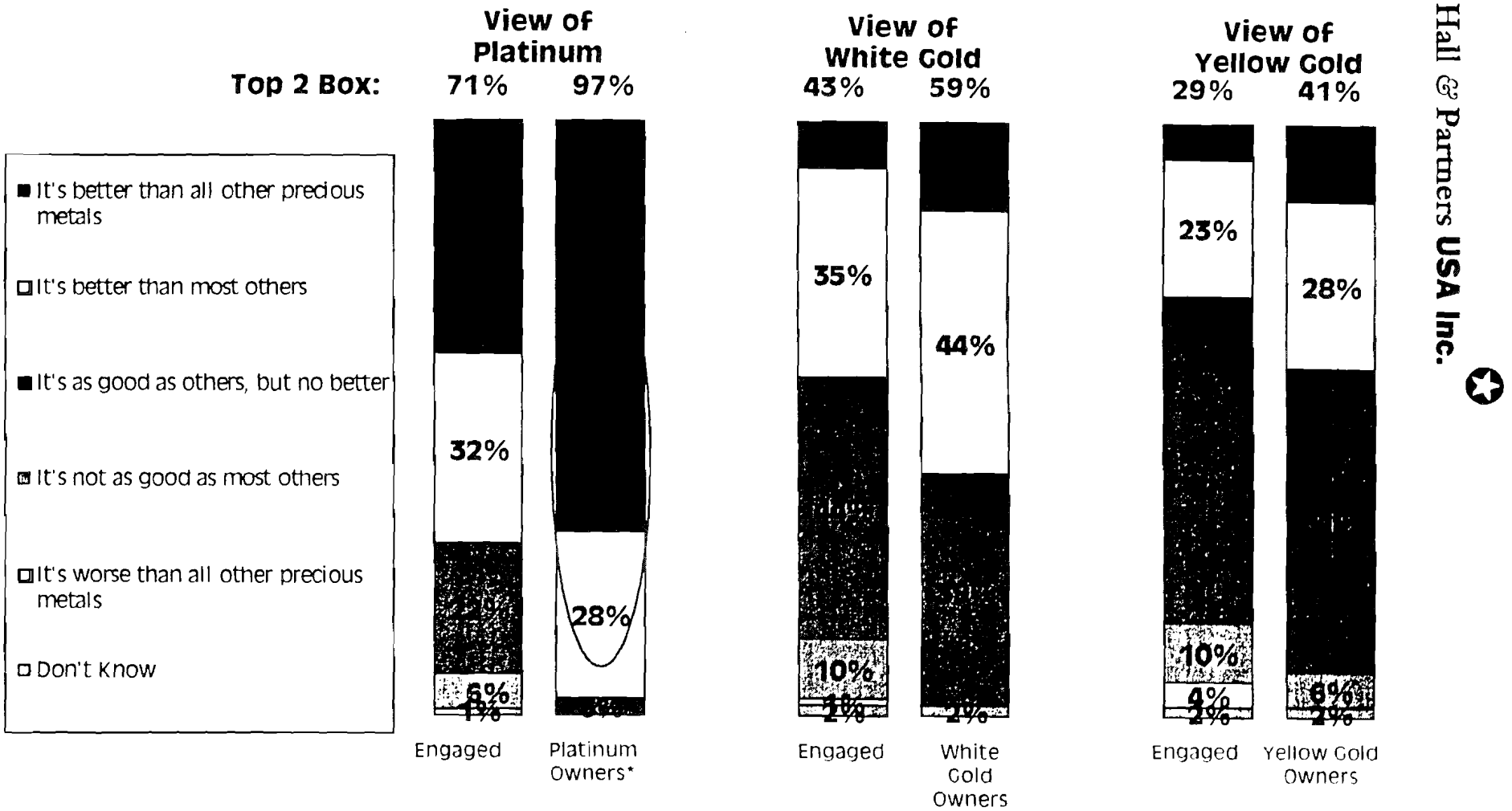


Base: All Women – Engaged (125), Own Platinum (29)*, Own White Gold (52), Own Yellow Gold (47)
Q8b Thinking about your wedding ring, which of the following phrases best describes how you feel about each of these precious metals?

*CAUTION VERY SMALL BASE SIZE

Perhaps driven by nearly universal agreement about Platinum's rational superiority

Brand Persuasion of metals they currently own



Hall & Partners USA Inc.

Base: All Women – Engaged (125), Own Platinum (29)*,, Own White Gold (52), Own Yellow Gold (47)
Q9 Which of the statements below describes your overall impression of each of the following precious metals?

*CAUTION VERY SMALL BASE SIZE

While white gold may be the cheap man's Platinum, for Yellow Gold owners Platinum doesn't seem to fit their style

What do owners of other metals think of Platinum?

	Platinum Owners	White Gold Owners	Yellow Gold Owners
	%	%	%
Something I would choose if money was no object	**93**	73	49
Will keep looking good over time	**93**	69	62
It's the highest quality	**90**	85	75
Is worth paying more for	**90**	58	38
Fits my style	**90**	67	23
Is a good investment	**90**	73	62
It's appropriate for many occasions	**90**	75	53
It's pure	**86**	69	62
It's eternal and enduring	**86**	69	45
Is expensive	**83**	89	85
Is the strongest you can choose	**83**	67	72
It's appropriate for different types of jewelry	**83**	69	55
It's a rare metal	**79**	67	68
Hard wearing	**69**	39	43
It's what everyone I know has or is getting	41	**50**	32

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Base: All Women –Own Platinum (29)*, Own White Gold (52), Own Yellow Gold (47)

Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'it totally applies' and give a score of "1" if you think 'it doesn't apply at all'

*CAUTION VERY SMALL BASE SIZE

Platinum owners appreciate the metal's strength and elegance, while Yellow Gold owners focus more on their metal being traditional, classic, everyday

Brand Personality of metals they currently own

	View of Platinum by Platinum Owners* %	View of White Gold by White Gold Owners %	View of Yellow Gold by Yellow Gold Owners %
Platinum is...			
Strong	**86**	42	38
Elegant	**83**	56	55
Unique	**83**	42	13
Stylish	**79**	50	49
Genuine	**76**	54	60
Modern	**69**	48	26
Trustworthy	**62**	46	47
Popular	**62**	44	47
Distinctive	**48**	33	21
Cool and distant	**28**	14	17
Platinum shares...			
Romantic	**69**	**64**	**70**
Sensible	38	**52**	**49**
Platinum is not particularly...			
Always in style/timeless	66	58	75
Warm and inviting	41	33	55
Classic	38	40	68
Everyday	28	35	62
Traditional	14	31	85
Inaccessible	10	4	13
Dull and boring	3	6	11

Base: All Women –, Own Platinum (29)*,, Own White Gold (52), Own Yellow Gold (47)

Hall & Partners **USA Inc.**

*CAUTION VERY SMALL BASE SIZE

A Broader Look

- As we saw earlier, women who were engaged, and not given Platinum, have a slightly weaker perception of Platinum (though still strong).
  - In fact, Platinum owners do have the strongest relationship with their metal and would hardly consider anything else for their wedding ring.
  - Platinum owners are also fiercely loyal to Platinum compared to owners of other metals - likely driven by the understanding that Platinum is the 'superior' metal and the 'one to have' at the moment.
  - Though ultimately, Platinum might not be right for everyone.
  - For owners of White Gold the decision may be more straight forward. For this group, price may be a deciding factor. Is White Gold more likely "the poor man's Platinum"?

A Broader Look

- For owners Yellow Gold, decisions seem to be driven by more than just price.
  - Even if money were no object, Platinum might not be right for them.
  - The color might not fit with their current jewelry collection or the metal might not look right against their skin.
  - For them Yellow Gold is a more traditional or classic choice, more warm and inviting.

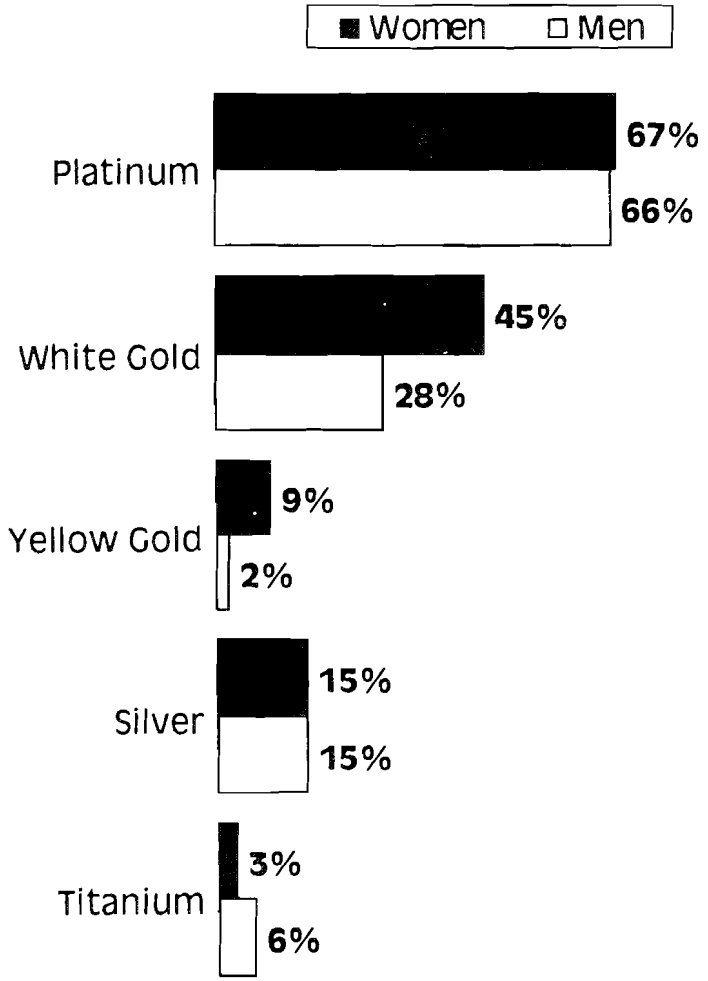
APPENDIX

Hall & Partners USA Inc.

Key Brand Measures

Among Total Men and Total Women

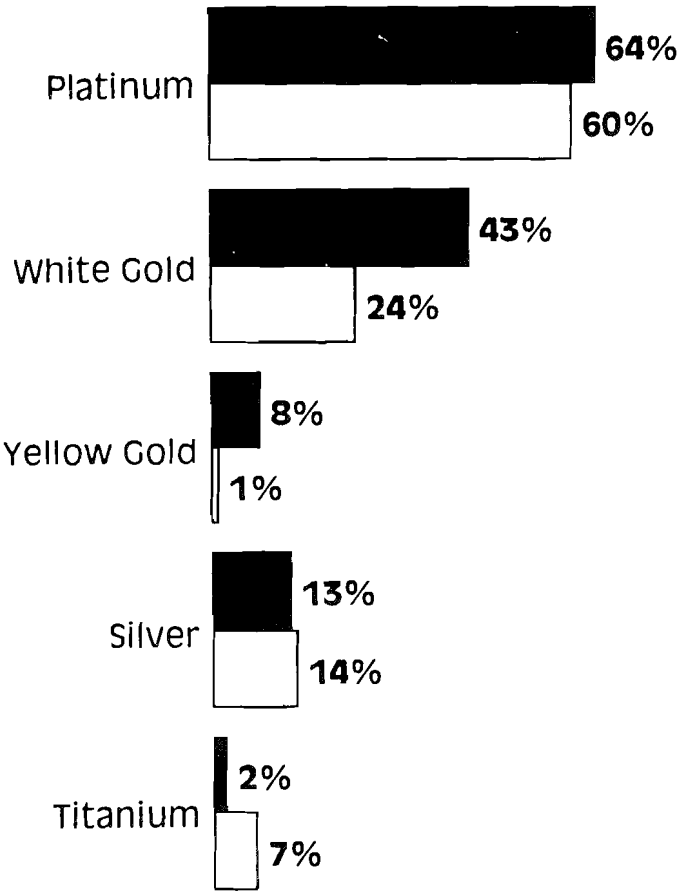
What precious metal would you consider for your engagement ring



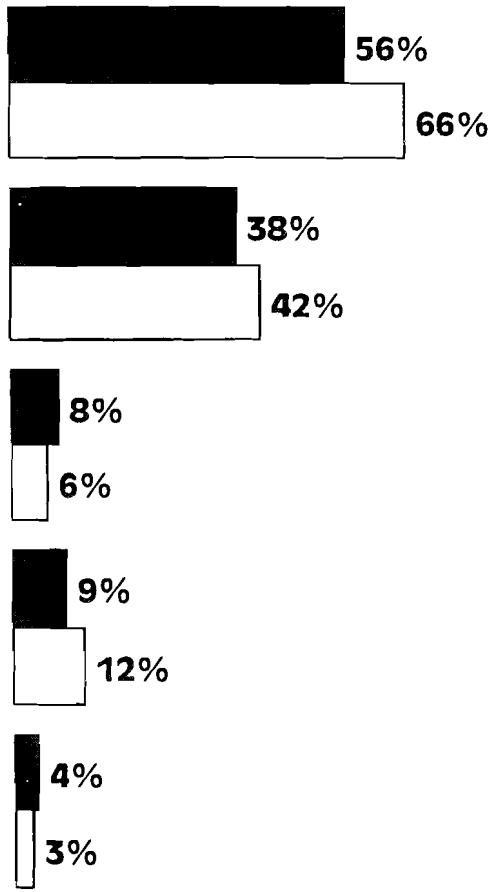
Base: All Women/Men (n = 375/226)

Q1 When thinking about **engagement rings**, what precious metals would you consider buying?

What precious metal would you consider for your own wedding ring?



What precious metal would you consider for your fiancée's wedding ring?



Women Men

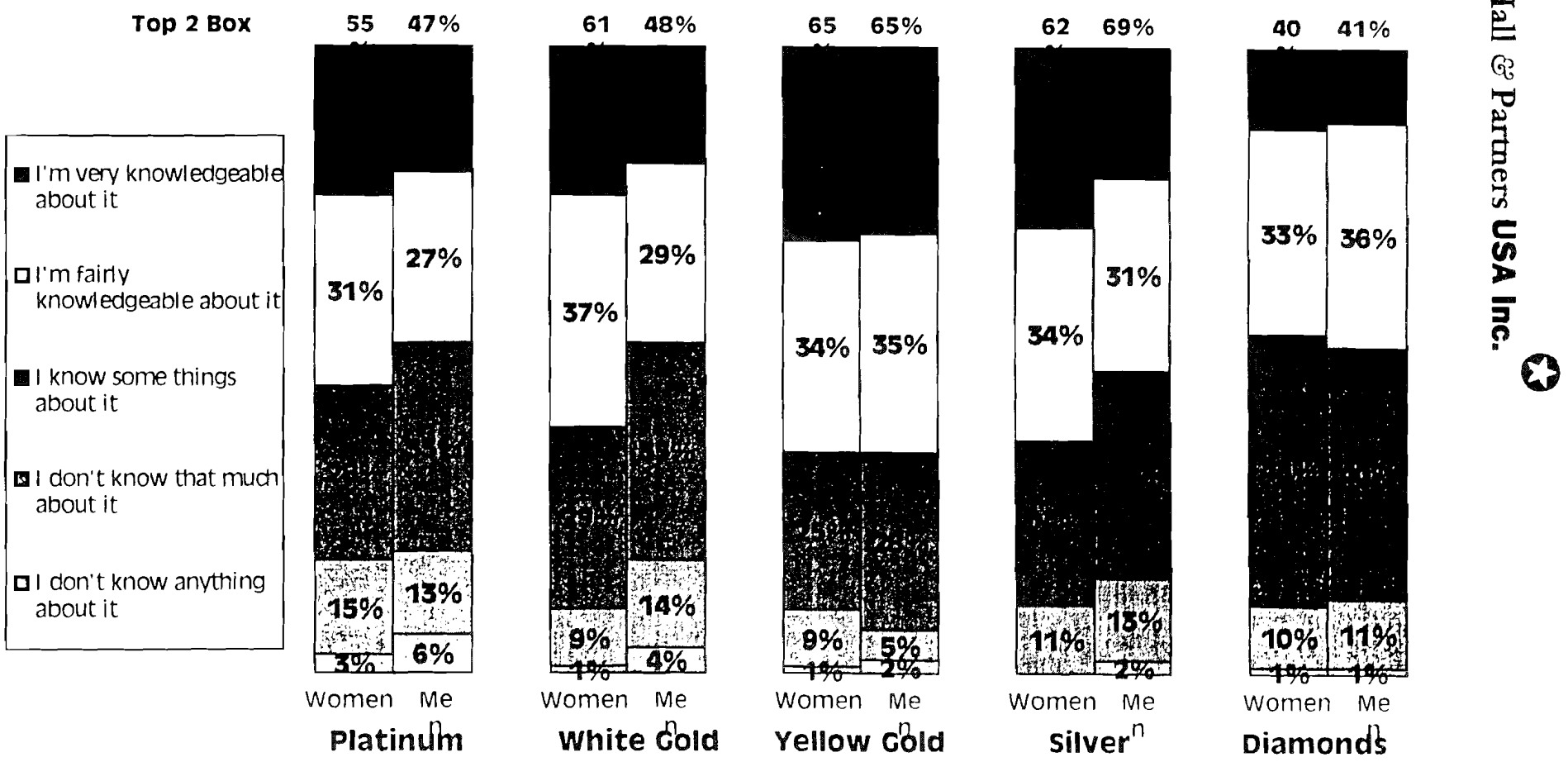
Hall & Partners USA Inc.

Base: All Women/Men (n = 375/226)

Q2a Now thinking about **wedding rings**, what precious metal would you consider for **your** wedding ring?

Q2b And, what precious metal would you consider for **your fiancée's** wedding ring?

Familiarity

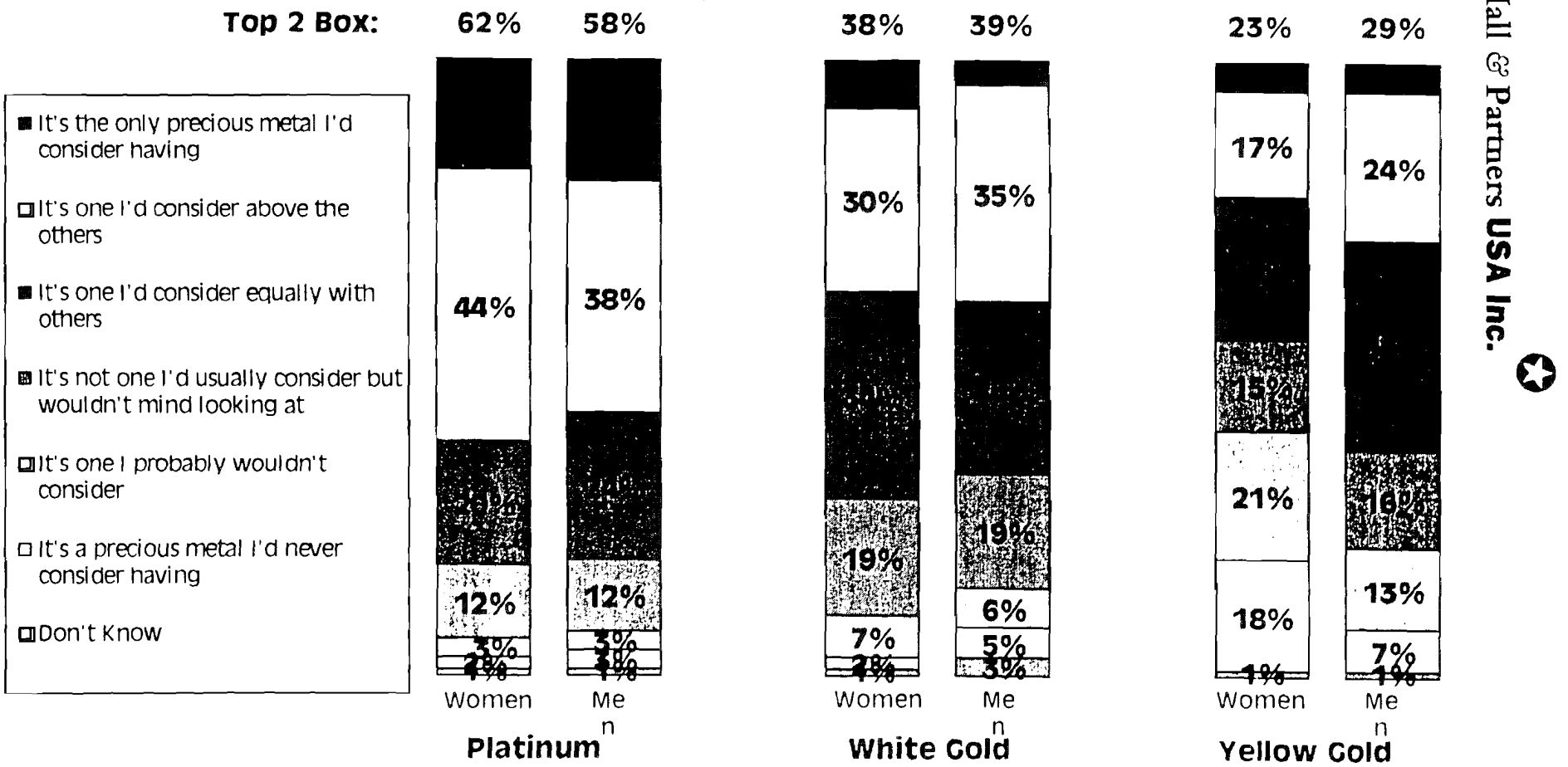


Base: All Women/Men (n = 375/226)

Q7a Now using the scale below, how much do you know about the following precious metals?

Q7b And, how much do you know about diamonds?

Brand Commitment – Engagement Rings

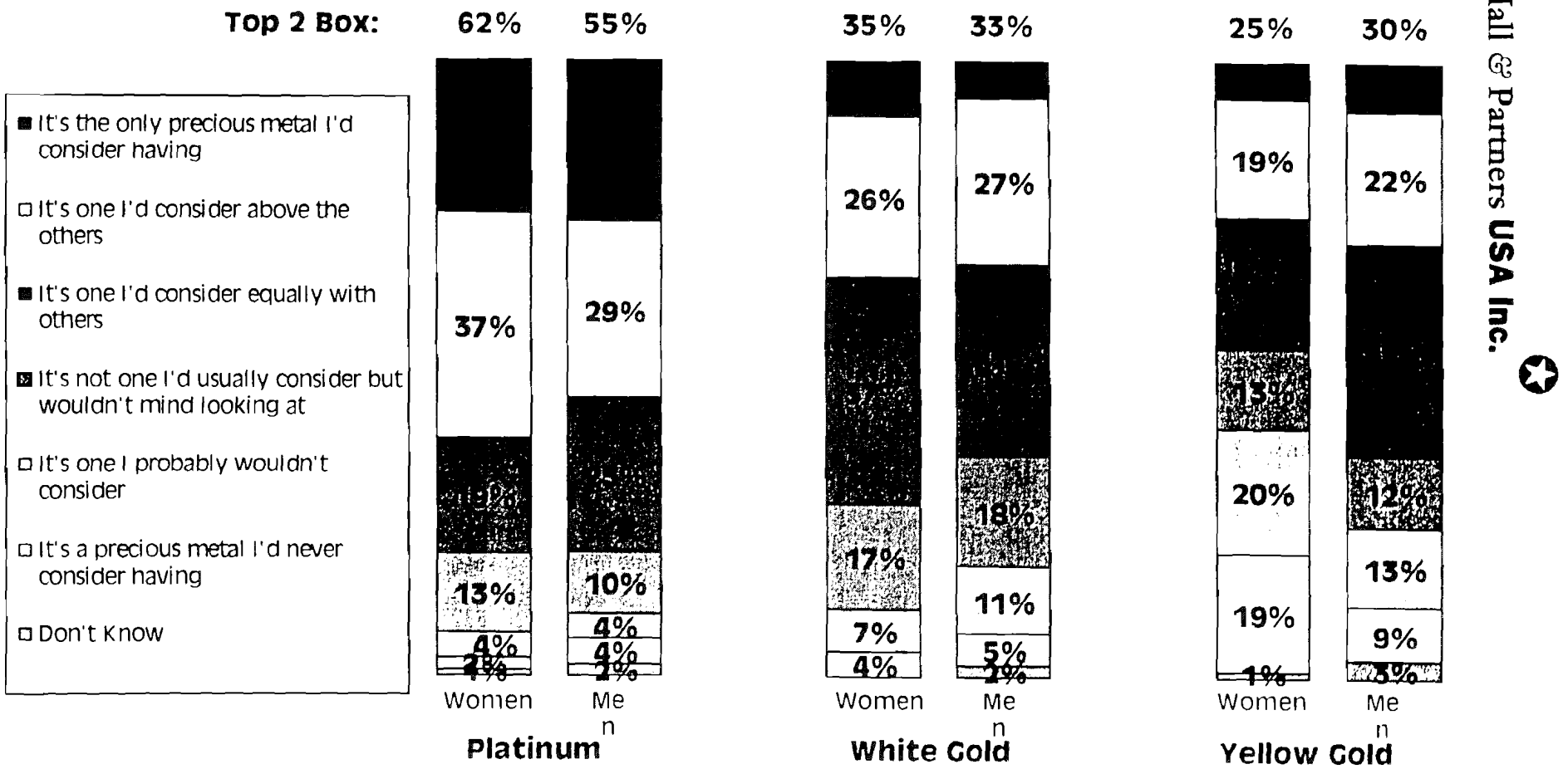


Hall & Partners **USA Inc.**

Base: All Women/Men (n = 375/226)

Q8a Thinking about an engagement, which of the following phrases best describes how you feel about each of these precious metals?

Brand Commitment – Wedding Rings

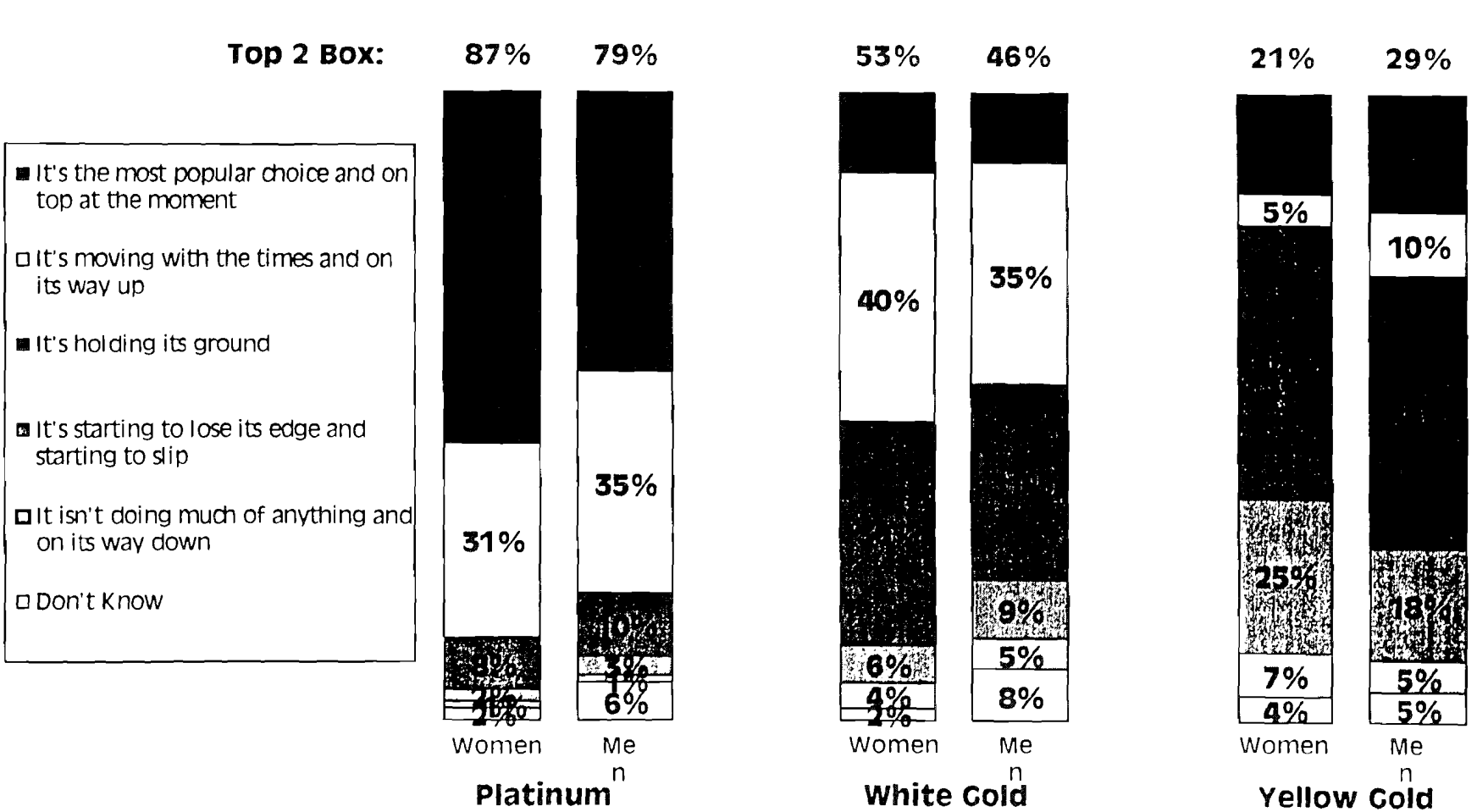


Hall & Partners **USA Inc.**

Base: All Women/Men (n=375/226)

Q8b Now thinking about your wedding ring, which of the following phrases best describes how you feel about each of these precious metals?

Brand Salience-Momentum

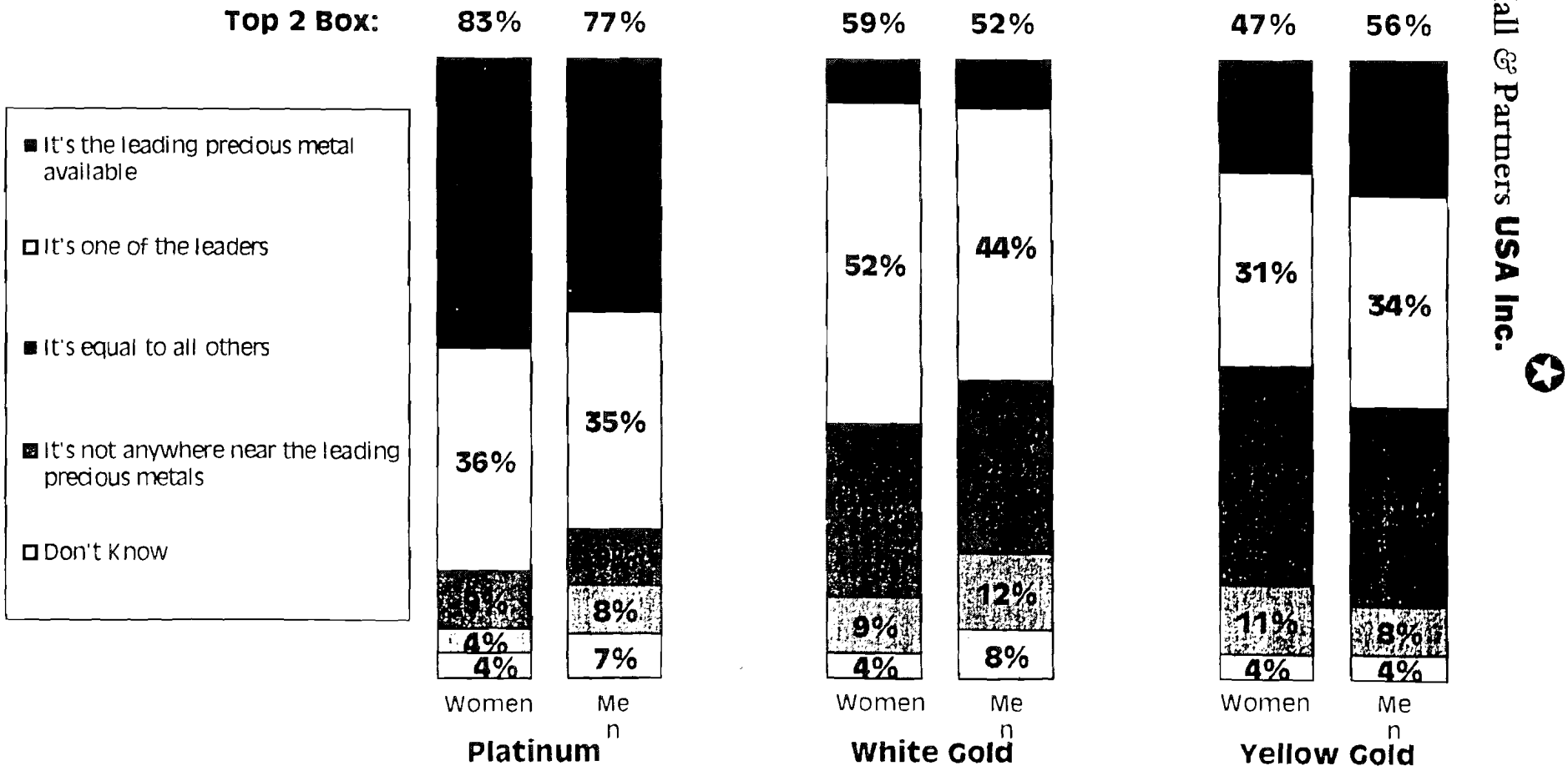


Hall & Partners **USA Inc.**

Base: All Women/Men (n = 375/226)

10 Now I'd like to know how much you feel each precious metal is growing or declining at the moment. Which of the phrases below best describes how you feel about each precious metal?

Brand Salience-Leadership

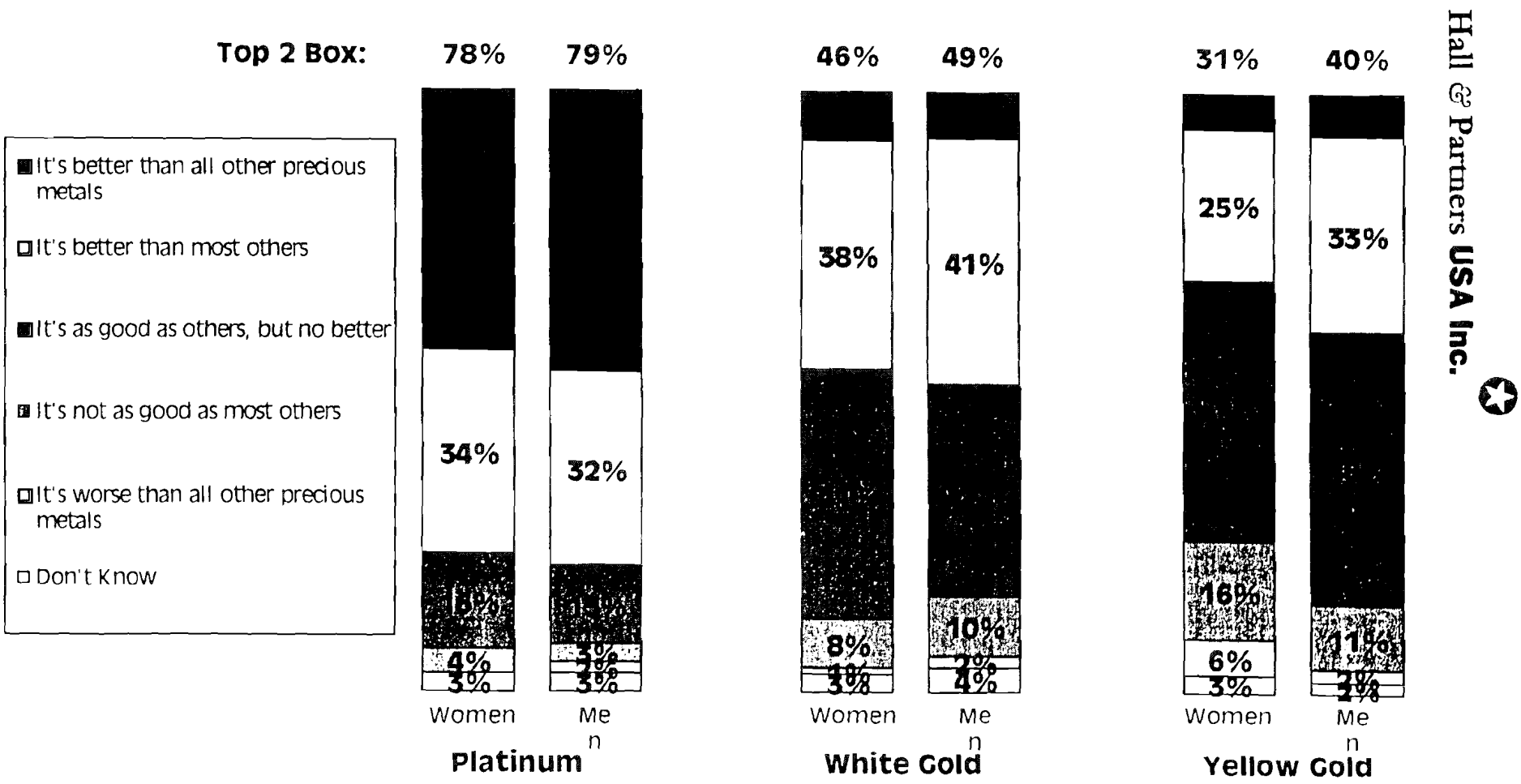


Hall & Partners USA Inc.

Base: All Women/Men (n = 375/226)

Q11 Based on your overall impression of each precious metal, how much do you feel each of these is a leader in the market?

Brand Persuasion



Hall & Partners USA Inc.

Base: All Women/Men (n = 375/226)

Q9 Which of the statements below describes your overall impression of each of the following precious metals?

The most precious of all metals

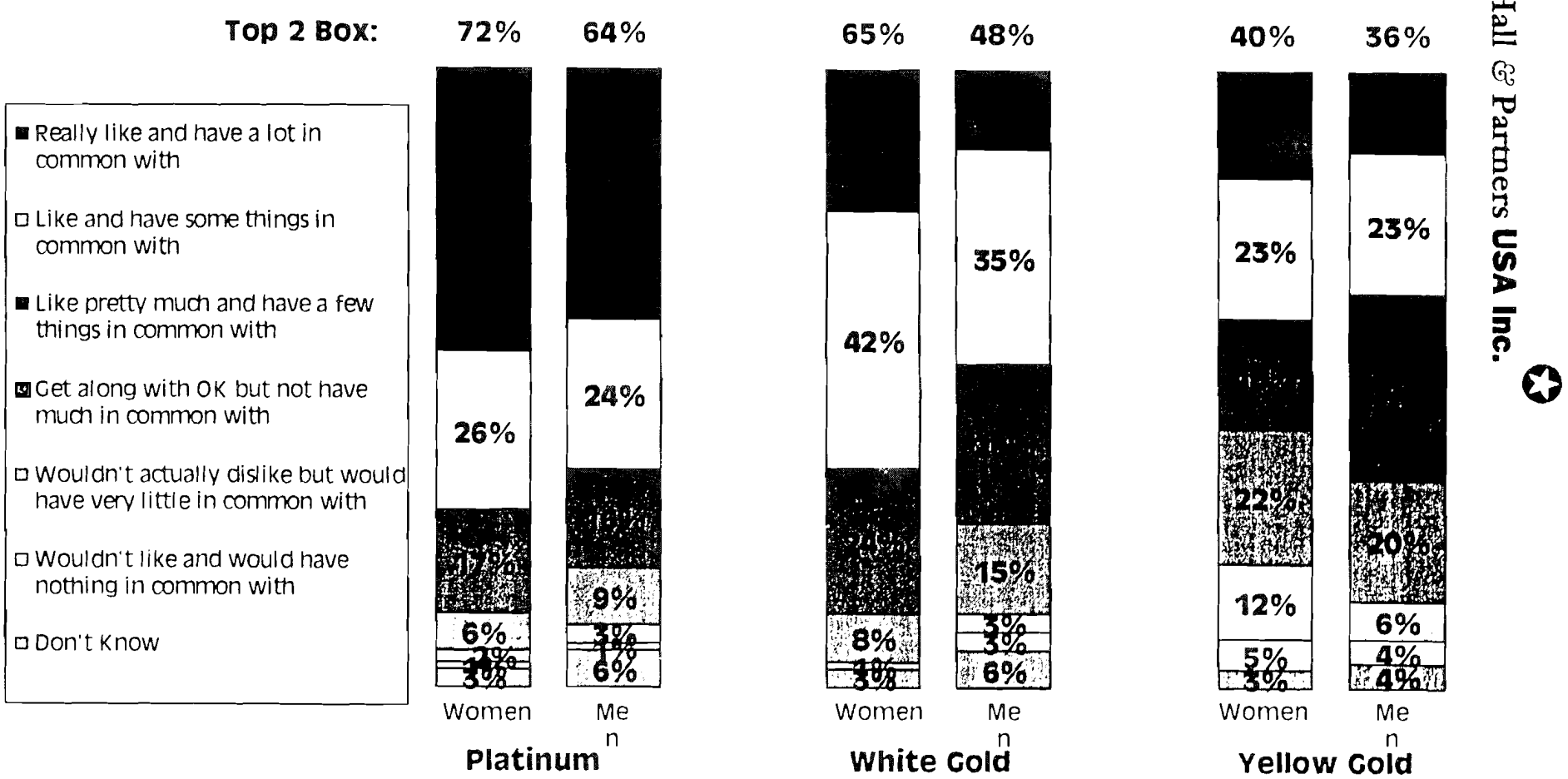
Brand Imagery-Platinum

8 or more	Women	Men
Is expensive	86	84
It's the highest quality	85	85
Is the strongest you can choose	80	74
Something I would choose if money was no object	79	76
Is a good investment	79	69
Will keep looking good over time	78	75
It's pure	77	74
It's appropriate for many occasions	76	89
It's eternal and enduring	72	63
Fits my style	71	67
It's a rare metal	70	70
Is worth paying more for	70	58
It's appropriate for different types of jewelry	69	62
Hard wearing	58	40
It's what everyone I know has or is getting	45	35

Base: All Women/Men (n = 375/226)

Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'it totally applies' and give a score of "1" if you think 'it doesn't apply at all' **SELECT**

Brand Involvement



Hall & Partners **USA Inc.**

Base: All Women/Men (n = 375/226)

Q12 Now we'd like you to do something a little different and imagine that these precious metals were to come to life as people. For each of these please indicate which of the statements best describes how close you would feel to him or her?

Brand Personality-Platinum

	Women	Men
	%	%
Strong	76	70
Modern	73	71
Elegant	66	52
Stylish	65	64
Unique	58	62
Distinctive	57	58
Genuine	56	55
Popular	53	43
Always in style/Timeless	52	39
Romantic	46	37
Trustworthy	36	23
Cool and Distant	29	29
Classic	26	13
Everyday	25	18
Warm and inviting	21	13
Inaccessible	19	23
Sensible	16	11
Traditional	9	8
Dull and Boring	3	6

Base: All Women/Men (n = 375/226)

Q13 Still imagining that these precious metals came to life as people, which of the characteristics below do you think describe the sort of person that each would be?

Key Brand Measures Among Women By Age

Key Brand Measures by Age

	Platinum		White Gold		Yellow Gold	
	18-24	25-34	18-24	25-34	18-24	25-34
Brand Commitment Engagement Ring (Top 2 Box) (It's the only precious metal I'd consider having/ It's one I'd consider above the others)	62	65	46	31	25	19
Brand Commitment Wedding Ring (Top 2 Box) (It's the only precious metal I'd consider having/ It's one I'd consider above the others)	59	63	44	27	29	23
Brand Persuasion (Top 2 Box) (It's better than all/ most other precious metals)	74	81	55	38	33	29
Brand Involvement (Top 2 Box) (Really like and have a lot/ some things in common with)	85	88	56	48	28	14
Brand Salience – Momentum (Top 2 Box) (It's the most popular choice and on top at the moment/moving with the times and on its way up)	81	81	59	58	51	48
Brand Salience – Leadership (Top 2 Box) (It's the leading precious metal available/ one of the leaders)	70	75	68	58	41	35

Base: All Women by Age – 18-24 (187) 25-34 (188)

Brand personality of metals by Age

	Platinum		White Gold		Yellow Gold	
	18-24	25-34	18-24	25-34	18-24	25-34
Strong	71	81	39	31	21	29
Modern	71	75	43	37	16	13
Stylish	65	65	52	49	23	21
Elegant	62	70	50	42	32	32
Unique	57	58	35	31	11	11
Genuine	55	57	47	37	41	47
Distinctive	55	59	25	29	13	14
Popular	54	52	40	37	29	32
Always in style/Timeless	46	59	43	45	50	47
Romantic	45	46	57	52	43	44
Trustworthy	32	40	29	36	37	41
Cool and Distant	31	27	21	15	9	11
Everyday	22	27	46	45	57	51
Inaccessible	20	18	4	3	10	5
Classic	20	31	36	32	61	60
Warm and inviting	20	23	29	31	43	45
Sensible	14	19	40	39	40	43
Traditional	6	12	21	29	72	77
Dull and Boring	4	3	10	14	33	33

Base: All Women by Age – 18-24 (187) 25-34 (188)

Brand imagery of metals by Age

8 or more	Platinum		White Gold		Yellow Gold	
	18-24	25-34	18-24	25-34	18-24	25-34
Is expensive	83	88	52	50	42	39
It's the highest quality	81	88	62	59	49	45
Will keep looking good over time	77	80	66	65	56	58
Is the strongest you can choose	77	83	46	45	39	36
Something I would choose if money was no object	75	82	60	45	39	34
Is a good investment	75	83	66	56	63	53
It's appropriate for many occasions	74	78	70	70	68	69
It's pure	73	80	51	53	58	52
It's a rare metal	70	71	42	38	33	27
Fits my style	67	75	67	55	37	34
It's eternal and enduring	67	76	59	52	59	55
It's appropriate for different types of jewelry	66	71	65	68	68	62
Is worth paying more for	65	75	49	46	36	32
Hard wearing	53	63	36	36	41	30
It's what everyone I know has or is getting	42	47	40	32	47	39

Base: All Women by Age – 18-24 (187) 25-34 (188)

Hall & Partners USA Inc.

Brand Personality & Imagery Measures

Among Men and Women

Brand Personality- Among Women

	Platinum			White Gold			Yellow Gold		
	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged
Strong	77	77	74	38	35	32	25	25	26
Modern	74	69	75	39	34	47	15	9	19
Elegant	69	70	59	42	47	49	34	26	37
Stylish	64	69	62	47	54	50	22	15	29
Distinctive	58	58	54	22	30	29	16	9	16
Always in style/Timeless	58	54	44	46	45	42	44	44	58
Unique	54	54	65	31	31	37	10	11	11
Genuine	54	58	56	39	43	44	41	40	50
Popular	50	54	54	36	40	38	33	26	34
Romantic	48	45	44	52	53	59	42	38	51
Trustworthy	38	37	34	32	32	34	42	35	40
Everyday	30	25	19	54	38	43	52	51	58
Warm and inviting	25	22	17	30	32	27	45	40	47
Cool and Distant	22	26	38	26	13	17	6	11	12
Classic	22	31	23	31	37	35	62	57	62
Inaccessible	21	17	19	4	2	5	7	6	8
Sensible	18	18	13	41	38	40	38	41	46
Traditional	10	10	6	24	30	22	74	74	75
Dull and Boring	2	3	4	17	11	8	34	43	22

Hall & Partners USA Inc.

Base: Women -Thinking/Shopping/Engaged (125/125/125)

Q13 Still imagining that these precious metals came to life as people, which of the characteristics below do you think describe the sort of person that each would be?

Brand Personality- Among Men

	Platinum			White Gold			Yellow Gold		
	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged
Modern	69	74	70	44	39	38	12	8	15
Strong	66	73	72	34	26	28	30	20	25
Stylish	60	64	68	34	48	37	21	26	20
Genuine	56	58	51	34	35	37	49	42	40
Unique	56	68	63	36	29	30	6	8	16
Distinctive	55	56	62	25	23	33	8	10	16
Elegant	53	49	53	49	31	34	38	33	26
Popular	40	34	54	43	34	28	40	40	29
Always in style/Timeless	36	39	42	36	30	26	49	48	49
Romantic	32	36	43	41	35	46	58	47	43
Cool and Distant	26	34	26	21	22	30	8	4	15
Trustworthy	25	21	24	19	18	30	49	38	38
Inaccessible	21	21	26	6	7	5	4	4	9
Everyday	19	16	20	34	29	32	47	47	50
Warm and inviting	12	13	13	22	27	25	47	42	38
Classic	11	10	18	21	23	25	66	71	54
Sensible	7	13	13	33	27	26	30	36	34
Dull and Boring	6	7	5	8	13	20	27	39	34
Traditional	4	5	13	25	22	26	67	75	71

Hall & Partners USA Inc.

Base: Men –Thinking/Shopping/Engaged (73/77/76)

Q13 Still imagining that these precious metals came to life as people, which of the characteristics below do you think describe the sort of person that each would be?

Brand Imagery- Among Women

	Platinum			White Gold			Yellow Gold		
	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged
Is expensive	85	87	86	57	53	44	43	39	38
It's the highest quality	84	89	81	58	62	61	47	44	50
Will keep looking good over time	83	81	71	74	60	64	59	53	58
Is the strongest you can choose	83	84	72	46	46	44	41	33	39
Something I would choose if money was no object	82	86	68	54	50	54	39	26	43
It's appropriate for many occasions	80	78	70	74	69	66	74	58	74
It's pure	78	81	70	51	54	50	56	53	55
Is a good investment	78	86	73	62	57	64	59	50	64
Fits my style	77	81	56	62	61	60	37	29	42
It's eternal and enduring	77	73	66	58	53	55	60	50	62
It's a rare metal	74	67	70	42	39	39	33	23	34
Is worth paying more for	74	78	58	50	50	44	36	30	35
It's appropriate for different types of jewelry	72	69	66	70	68	62	69	59	68
Hard wearing	64	62	47	35	41	33	31	34	41
It's what everyone I know has or is getting	45	50	39	37	39	32	44	37	48

Base: Women –Thinking/Shopping/Engaged (125/125/125)

Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'it totally applies' and give a score of "1" if you think 'it doesn't apply at all'

Brand Imagery- Among Men

	Platinum			White Gold			Yellow Gold		
	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged	Thinking	Shopping	Engaged
Is expensive	84	82	87	56	35	43	60	33	37
It's the highest quality	80	87	87	58	51	47	59	46	49
Will keep looking good over time	74	73	79	56	48	47	62	43	57
Is the strongest you can choose	74	74	75	44	38	34	30	30	38
It's pure	73	70	78	52	39	45	66	46	55
Something I would choose if money was no object	71	74	83	56	36	42	51	27	30
Fits my style	64	68	70	59	47	42	41	30	33
It's a rare metal	64	69	78	45	35	41	49	27	38
Is a good investment	62	71	72	52	51	45	60	47	58
It's eternal and enduring	62	62	66	53	33	43	60	43	58
It's appropriate for different types of jewelry	62	58	67	67	55	53	70	52	66
Is worth paying more for	58	60	58	45	31	34	34	20	34
It's appropriate for many occasions	58	55	65	64	46	54	73	53	55
Hard wearing	33	35	53	15	21	29	25	17	29
It's what everyone I know has or is getting	29	30	45	32	34	29	55	42	42

Hall & Partners USA Inc.

Base: Men –Thinking/Shopping/Engaged (73/77/76)
Q14 Of the characteristics below, please indicate which you feel apply to each precious metal below. Using a scale of 1 to 10, please give a score of "10" if you think 'It totally applies' and give a score of "1" if you think 'It doesn't apply at all'

HOOVER &STRONG

MEMORANDUM

Date: 08/25/05
To: Jurgen Maerz, PGI USA
CC: Torry Hoover, George Hoover.
From: Stewart Grice
Subject: Low purity platinum testing.

A sample of low purity platinum was forwarded by Jurgen Maerz of PGI USA. Jurgen requested tests on wear resistance, tarnish resistance and solderability. The sample was sent to the New York Assay Office for composition analysis with the following results:

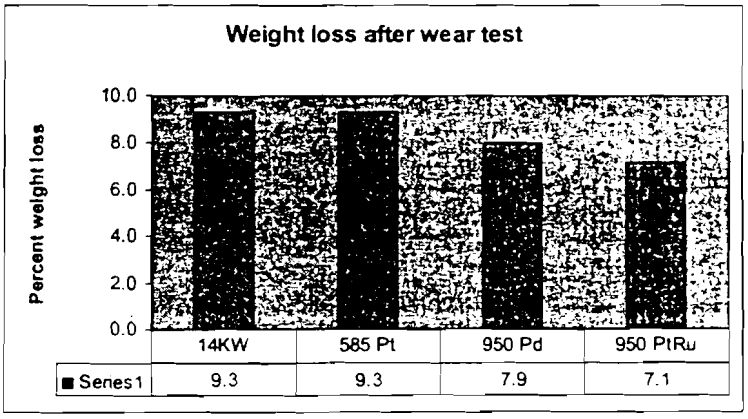
Platinum	59.42%
Copper	36.59%
Cobalt	3.90%
Gold, silver,nickel	Trace amounts

The composition would suggest this was a sample of a 585 platinum alloy. The composition was normalized to 58.5% platinum and a 10 oz button was cast, rolled and manufactured into plain wedding bands for testing.

Abrasion wear testing.

The 585 platinum was tested for wear resistance using a 14kt nickel white gold as a benchmark. The nickel white gold chosen has a hardness value of 165HV when annealed, similar to the value of 170HV quoted for the 585 platinum alloy. Also included in the test were rings manufactured from 950 platinum ruthenium and 950 palladium "TruPd™", with annealed hardnesses of 130HV and 105HV respectively. The wear test used was a standard barrel test for 12 hours in abrasive media. While this test cannot be correlated to "years of normal wear" and is empirical in nature only, it will give an indication of the relative intrinsic wear characteristics for each alloy tested. The following results were determined as a percentage of weight loss from original weight.

	Weight loss
14kt white gold	9.3%
585 platinum	9.3%
950 palladium	7.9%
950 platinum ruthenium	7.1%



The tests suggest that the 585 platinum alloy has wear characteristics identical to those of the 14kt white gold, and inferior to both the 950 platinum ruthenium and the 950 palladium alloys. These results suggest that the 585 platinum alloy tested does not show the wear characteristics typical of other high purity platinum group metals, but behaves in a similar manner to a karat gold alloy.

Tarnish resistance.

Samples of the 585 platinum, 950 platinum ruthenium, 950 palladium and 14kt white gold alloys were placed in a dessicater under a variety of sulfur-containing atmospheres with the following results:

	Sodium bisulfite	Sulfuric acid	Sulfur dioxide
14kt white gold	No tarnish	Tarnish	Tarnish
585 platinum	No tarnish	No tarnish	No tarnish
950 platinum ruthenium	No tarnish	No tarnish	No tarnish
950 palladium	No tarnish	No tarnish	No tarnish

These results show that the 585 platinum has similar tarnish resistance to 950 PtRu and 950 palladium under all test conditions. While differences may be detected using other tarnish-inducing atmospheres, for these tests the three platinum group alloys exhibited the same excellent tarnish resistance.

Oxidation resistance.

Samples of the 585 platinum alloy were heated to annealing temperatures using a torch. A black oxide developed on the surface of the ring. Fluxing can help this but the best results for annealing will be obtained using a protective atmosphere furnace.

Any oxide present was easily removed in warm sparex solution.

A sample of 950 platinum ruthenium did not oxidize under the same test conditions.

Soldering trials.

A sample ring was cut with a saw and the resulting gap soldered using 1300 platinum solder. If the alloy was soldered as per the 950 platinum ruthenium with no flux used, there was a poor joint due to the heavy oxide layer generated (figures 1a,b). Fluxing the joint prior to soldering improved matters (figures 2a,b) but there was still evidence of oxide after soldering, and on close examination there was an incomplete joint. This is probably because the upper working limit of the flux had been reached using this solder. Use of a higher specification flux or a lower grade solder may improve results, however the lower grade solder may present color matching and finishing difficulties.

Figure 1a.

Figure 1b.

Figure 2a.

Figure 2b.

Welding trials.

Results for the welding trials were similar to those for soldering. Poor joint quality when no flux was used (figures 3a,b) and marginal improvement with the use of flux (figures 4a,b).

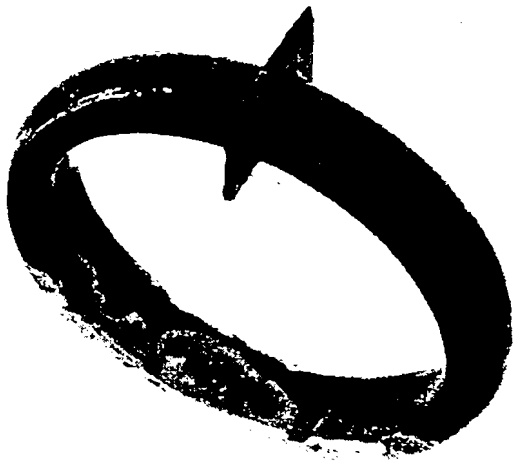


Figure 3a.

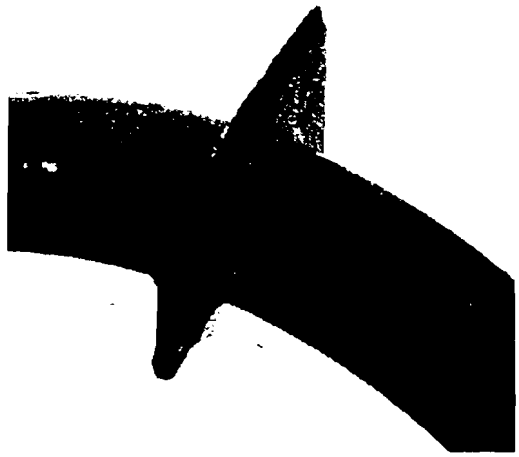


Figure 3b.

Figure 4a.

Figure 4b.

Stewart Grice
Mill & Refining Director
Hoover & Strong Inc.

Attachment D

Precious Metals West / Fine Gold
608 South Hill St. #407, L.A. California 90014
Phone (213) 689-4872 Fax (213) 689-1654 TOLL FREE (800)999-PLAT
WWW.PMWEST.US THEKRAFTWERKS.COM 950PD.COM email Daniel@preciousmetalswest.com

To get an insight into possible low purity platinum alloys using base metal, the following tests were made at PM West facility in Ontario CA. All tests were conducted by Mr. Daniel Ballard of PM West, Los Angeles, CA

Test 1

Pure Platinum Pt 999.9 was alloyed with 60% Cu/25% Ni/15% Zi alloy in common use for making white gold to create a low purity 585 Pt content product.
This seemed an obvious choice for simple reasons. It is an established white alloy designed for precious metals and would be high on the list

Test 2
Pure Platinum Pt 999.9 was alloyed with a mix of 50%Cu and 50% Co to create a Pt585 alloy.

Test 3

Pure Platinum Pt 999.9 was alloyed with a Silver/Copper master alloy, in common use for making 18K gold alloys.

Test #1 Alloy Composition

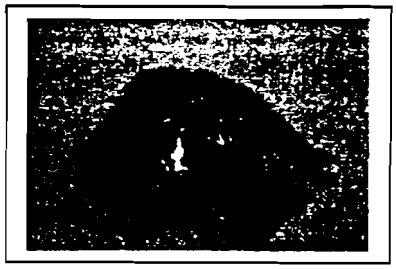
Alloy #1	Pt 585 ppt	Cu 250 ppt	Ni 103 ppt	Zi 62 ppt
Alloy #2	Pt 585 ppt	Cu 208 ppt	Co 207 ppt	
Alloy #3	Pt 585 ppt	Cu 208 ppt	Ag 207 ppt	

Procedure Test #1

A 1/4 Toz platinum coin was rolled into very thin sheet at or below .2mm. Using a Wesgo type crucible as a melting platform, the sheet was coiled and the alloy dropped to the bottom of a vertical spiral pipe formed by the coil of sheet.

With a hydrogen/oxygen torch the sheet was melted to immediately cover the alloy mix with molten platinum which reduced vaporization of the zinc.

During the melt Zinc was gassing out of the mixture at a rate high enough to cause tiny coruscating balls of metal to fly out of the crucible. The mix did not blend well.
After continuous melting, the remaining nickel blended with the platinum and the copper and formed a button. The cast button was hammered into a flat shape suitable for rolling. The button was heavily oxidized and the alloyed material was quite hard and difficult to roll.



Button Test #1

Flat Test #1 w. Pt Coin

Procedure Test #2

A 1/4 Toz platinum coin was rolled into very thin sheet at or below .2mm. Using a Wesgo type crucible as a melting platform, the sheet was coiled and the alloy dropped to the bottom of a vertical spiral pipe formed by the coil of sheet.

With a hydrogen/oxygen torch the sheet was melted to blend the contents to create a button the 50% copper 50% cobalt was impossible to incorporate fully. The cobalt would incorporate and, as the temperature reduced, the cobalt would reform at the surface of the melt. Finally the mixture was quenched very high temperature at which all the elements appeared incorporated. The button was beaten into a flat profile for rolling and was rolled flat. It appeared to be cracking and highly magnetic and oxidized

Procedure Test #3

A 1/4 Toz platinum coin was rolled into very thin sheet at or below .2mm. Using a Wesgo type crucible as a melting platform, the sheet was coiled and the alloy dropped to the bottom of a vertical spiral pipe formed by the coil of sheet.

The silver and copper blend had the most success in the initial melt. This was an easy blend. The resulting button had black and white oxide on the surface. It was hammered down and rolled flat. The button was somewhat softer but also oxidized

Button Test #3

All three buttons

Malleability Test

All three buttons were cleaned up with a "Craytex" type of abrasive tool at the bench. None of the bars rolled without cracking prior to 50% reduction. This stands in stark contrast to 900 or 950 Pt's very forgiving nature in surface quality after the melt and rolling behavior.

Oxidizing Test

All variations showed a white color in the metal. It appears platinum can easily overcome the redness brought in by the copper. All buttons were annealed under normal atmosphere, which simulates a bench jeweler doing torch repair. All three buttons oxidized immediately to dark/black color

Tarnish Test

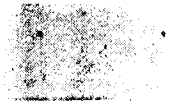
All three buttons were placed in a heated liver of sulphor and water solution. All three materials showed evidence of tarnishing. This was a surprise, and is one best avoided.

Conclusion

While only a few alloys were being tested, it appears best to use primarily platinum group metal with platinum. In my personal albeit studied opinion, base metal 585
platinum will act much like nickel based white gold: Easy to oxidize and difficult to roll or cast.

Non PGM low content platinum may save some money, but this will come with some negative trade offs.
-alloys that are difficult to blend or cast.
-alloys that oxidize
-alloys that tarnish.
-platinum alloys that behave similar to white gold, rather than platinum
-alloys that may or may not be hypo-allergenic

Daniel Ballard



Attachment E

CIBJO PROPOSED STATEMENT ON PLATINUM NOMENCLATURE

No.	CIBJO DELEGATIONS	AGREE	DO NOT AGREE	ABSTAIN
1	Australia	1-3-4	2	
2	Austria	1-2-3-4		
3	Bahrain	1-2-3-4		
4	Brazil	1-2-3-4		
5	Canada	mixture		
6	China*			
7	Czech Republic*			
8	Denmark*			
9	Egypt*			
10	France*			
11	Germany		1-2-3-4	
12	Greece*			
13	Hong Kong*			
14	India*			
15	Israel*			
16	Italy	1-3	2	4
17	Japan	1-2-3-4		
18	Lebanon*			
19	Lithuania	1-2-3-4		
20	Norway	2-3-4	1	
21	Pakistan*			
22	Perù*			
23	Portugal	1-3-4		2
24	Russia	1-2-3-4		
25	Saudi Arabia	1-2-3-4		
26	South Africa*			
27	South Korea*			
28	Spain (L) *			
29	Sri Lanka*			
30	Switzerland	1-3-4	2	
31	Thailand	1-2-3-4		
32	United Arab Emirates	1-2-3-4		
33	United Kingdom	1-2-3-4		
34	United States of America*			
*	**Countries which did not reply**	**= in agreement**		

QUESTIONNAIRE:

1. The use of the unqualified word "platinum" or Pt, Plat or national symbol, followed by the purity in parts per thousand e.g. Pt950, to mark, market or describe jewelry items containing 850 ppt or more pure platinum is consistent with international industry practice and existing international standards and should be maintained.

2. In the United States, regulations and applicable industry practice hold that for jewelry items containing less than 850ppt pure latinum, the descriptive term platinum, or the mark "Pt" or "Plat" can only be used if the pure platinum is combined with other platinum group etals. Under U.S. FTC guidelines, in the case of jewelry items containing 500 ppt - 849 ppt pure platinum, if the word "platinum" is used to describe these items, it must be qualified by stating the number of ppt's of platinum in the item and the other platinum group metals must also be qualified with the number of ppt's for each PGM used in the alloy. CIBJO supports the use of the word platinum to market or describe alloys containing less than 850 ppt pure platinum only when combined with other platinum group metals and when all ppt's of the platinum and the PGM's are clearly identified.

3. Combinations of platinum and non-platinum group metals (including gold and silver) with fewer that 850 ppt pure platinum should not be marked, marketed or described using the word "platinum". These items may be marked, marketed or described using other names that do not mislead or confuse the buyer regarding the true composition of the metal alloy

4. The creation of standards for nomenclature, thickness of coating and grades of purity of metal for coating or plating for jewelry items coated or plated with platinum or other PGM's should be addressed by specific regulations addressing thickness and nomenclature, where they do not currently exist