

## Did You Know?

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## This Month's Topic: Value of Birthstone on Grade Point Average Upon Graduation

The Office of Institutional Effectiveness, Research, and Planning (OIERP) conducted a study of the value of a birthstone on the grade point average (GPA) of a student graduating from Crafton Hills College using a methodology designed by the Gemological Institute of America (GIA) in collaboration with the fine folks at the Jewelry Exchange in Tustin. Birthstones were identified through the American Gem Society, and gem values were collected using datasets available from Gemval and GemSelect.

The amethyst was statistically significantly (p=0.04) more likely to result in a higher GPA upon graduation (3.16) than the average birthstone (3.12). Simultaneously the amethyst had the most affordable value per grade point (VGP) of \$7.91 in comparison to the average birthstone (\$144.84).

<b>E</b> RAFTON HILLS	Population	Grade Point Average	Value per Grade Point
	(N)	(GPA)	(VGP)
Birthstones	12,668	3.12	\$144.84
Amethyst	Aquamarine	Diamond	Emerald
N: 940	N: 1,063	N: 964	N: 1,100
GPA: 3.16	GPA: 3.10	GPA: 3.12	GPA: 3.11
VGP: \$7.91	VGP: \$64.53	VGP: \$689.12	VGP: \$321.15
ES: 0.07	ES: -0.04	ES: 0.00	ES: -0.01
P: 0.040	P: 0.214	P: 0.943	P: 0.678
Garnet	Pearl	Peridot	Ruby
N: 1,030	N: 1,093	N: 1,102	N: 1,113
GPA: 3.12	GPA: 3.11	GPA: 3.11	GPA: 3.14
VGP: \$40.02	VGP: \$56.20	VGP: \$16.06	VGP: \$382.10
ES: 0.00	ES: -0.01	ES: -0.01	ES: 0.03
P: 0.890	P: 0.655	P: 0.645	P: 0.276
Sapphire	Tanzanite	Topaz	Tourmaline
N: 1,189	N: 1,004	N: 1,007	N: 1,063
GPA: 3.10	GPA: 3.15	GPA: 3.11	GPA: 3.12
VGP: \$56.48	VGP: \$23.79	VGP: \$24.10	VGP: \$56.14
ES: -0.04	ES: 0.06	ES: -0.02	ES: -0.01
P: 0.201	P: 0.089	P: 0.587	P: 0.826

Note: "ES" denotes the effect size where a value >0.20 is considered a practically substantial difference. "P" denotes statistical significance where a value <0.05 is considered a statistically significant difference.

When asked about the potential impact the value of their birthstone had on their GPA upon graduation, one person with an amethyst birthstone stated, "Yeah, I'm not surprised." Another person with a sapphire birthstone exclaimed, "Wait, what?!" A person with a peridot birthstone stated, "I didn't even know I had a rock."

## **Potential Implications:**

- CHC can consider offering community courses for expecting parents on choosing the most beneficial birthstone for their child.
- CHC students should consider how the value of their birthstone will impact their GPA upon graduation and plan accordingly.

A copy of the study and full methodologies can be found on the OIERP website at http://www.craftonhills.edu/research