

# Copying and its place in product development: definitions and practices by fashion industry personnel

## Abstract

Having apparel similar to what others are wearing is a basic desire in the fashion world and results in copying. Copying is both easier with technology and more prevalent with the attraction of brands and logos; however, research in the fashion literature is limited in the exploration of copying. To address this gap, this study investigated the definition of copying, the integration of copying technologies into product development, and training within the industry relative to copying and counterfeiting. Ten product development personnel working in the fashion industry were interviewed using an online, structured survey technique. Findings indicate that copying is inherent in the product development process for fashion goods with important implications for education and training about copying and counterfeiting.

**Keywords:** fashion, product development, copying, knock-offs, counterfeiting

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## Introduction

The desire to have something that another person has is a basic emotion to humankind. This desire to emulate or copy is an underlying tenant of the conspicuous consumption theory.<sup>1</sup> When this theory is applied to the area of fashion, fashion theory emerges with specific models of fashion adoption. This body of study for fashion theory with a flow to fashion adoption is set forth in this study as a perspective for viewing the practices of copying.

Transferring the conspicuous consumption theory into the operations of the fashion industry, researchers and authors of textbooks often describe, in detail, ways for designers and product developers to seek inspiration for a product idea from a variety of people, places and things (i.e., trend analysis).<sup>2-6</sup> Whether stated directly or implied, these processes involve some level of copying to produce the right product. Getting the right product to the right customer has long been the goal of marketing and achieved through the process of product development.<sup>7,8</sup>

Given the lack of research about copying as related to the product development process within the fashion industry combined with changes in the technology to create copies,<sup>9,10</sup> more information needs to be known about the copying practices in the fashion industry. Thus, the first purpose of this study is to examine the techniques and use of copying in the fashion product development process for apparel manufacturers. Supportive of this purpose and for reasons of clarification, the study also included definitions of knock-offs and counterfeiting.

## Review of literature

### Copying within product development definitions and models

This study of the use of copying within the fashion industry starts with an understanding of the product development process. Kotler's classic definition of product development describes an eight-stage process beginning with idea generation and ending with commercialization.<sup>11</sup> This definition of product development has varied little over the past 40 years. The product development description, beginning with conceptualization and ending with the commercialization of product for the market, posted on *Indeed*, a well-known job search website in 2023, is essentially the same as

Kotler's description.<sup>12</sup> In spite of the continued stable definition of product development across industries, copying is not mentioned in any other of the product development references reviewed by the researchers. Nevertheless, it is in the product development process that designers and manufacturers, especially in the trend analysis and ideation stages, that copying is most likely to take place.

For the fashion industry specifically, the focus of product development definitions and research ranges from the classic product development study by Gaskill<sup>13</sup> to more current studies exploring international luxury fashions.<sup>14,15</sup> Other product development studies in the fashion industry focus on the development of models (e.g., creation of detailed, multi-step models).<sup>16-19</sup> Some model development research is specific to a company, a product, or manufacturing technique.<sup>20-22</sup> In more recent academic literature, product development models for fashion focus on the introduction of new technology<sup>23</sup> and inclusion of sustainability.<sup>24</sup>

Each model has similarities in the definition of the product development process and in the inclusion of individual activities but often has differences in wording or sequencing of activities reflective of the research sample from which the data were drawn. Regardless of methods and content focus, each of these models start with research or idea generation and move through a refinement of the new product idea to sample development communicated through more complete design ideas with sketches, on next to preproduction activities involving prototypes, specifications and patterns, and finally moving into marketing the product to in-house sales staff and external customers. The product, once refined and accepted, is sent to production.

Prior to the final acceptance and production stage, all product development stages seem potentially open to include copying, but copying as a technique within product development is not mentioned in these studies and has received limited to no mention in academic literature. Some implications to copying were found. For example, the stage of trend analysis, which is a basic method for observing styles, colors and fabrications could be a precursor to copying.<sup>25-27</sup> But, these authors do not mention directly how or when to copy trends to create new fashions.

Although implied in steps within many product development models, no research was found by these researchers verifying the process of copying in industry. For example, a search using the "find"

function with Acrobat Pro 2017, through multiple research articles on product development models published over the past 20 years revealed no use of the word “copying” in the text of these articles. In addition, a similar word search within the sites specific to journals for fashion studies showed copying used only for studies on historic costume, re-enactment and other cultural studies.<sup>28</sup>

### Definitions of copying, knockoffs and counterfeiting

Copying, although not found in product development research, is covered by Kincade and Gibson<sup>29</sup> in their fashion textbook where the authors describe the process of copying components of a deconstructed garment with a rub-off technique, an older copying method used before digitizing. Variations of this traditional method are still described in pattern making textbooks, internet blogs, and YouTube videos.<sup>30</sup> Knockoffs are defined as “copies of high-priced” designs<sup>31</sup> and are mentioned by Wickett et al.<sup>32</sup> as a simpler but similar copy. Stone and Farnan also concurred that knockoffs were cheaper or lower priced copies.<sup>33</sup>

In contrast to the limited definitions of copying or knockoffs, more coverage is given to the definitions of counterfeiting in both popular and academic research. A general definition of counterfeiting is as follows: “Counterfeiting occurs when someone copies or imitates an item without having been authorized to do so and passes the copy off for the genuine or original item.”<sup>34</sup> Two factors are considered for identifying counterfeiting: (a) the copying of a logo, brand or trademark and (b) the intention to deceive the buyer.<sup>35–38</sup> Legal issues are emphasized in counterfeiting,<sup>39,40</sup> particularly when a branded or trademarked logo or style is duplicated. Regardless of the terms used, the central principle of counterfeiting remains the same. Counterfeiting is theft of an intellectual property, tangible or intangible, for direct or indirect profit and can result in legal prosecution.

### Theoretical framework: fashion adoption process

The manner in which Blumer<sup>41</sup> describes individual adoption of what is fashionable is similar to how more recent researchers describe the fashion adoption cycle.<sup>42,43</sup> Fashion apparel is what people adopt or choose to purchase and wear, which is often copies or modifications of what other individuals or groups are wearing. The desire to ‘fit-in’ or copy the fashion of a specific group is cited as a reason for consumer purchases of apparel and accessory items that are copies of name brand or designer products.<sup>44,45</sup> With the ease of electronic communication, trend watchers, fashion bloggers and other social media followers are continuously, and sometimes simultaneously, reviewing, discussing and copying the latest fashions. Terms from textbooks that include methods for copying<sup>46–48</sup> and from research studies about product development<sup>49–51</sup> were used in conjunction with fashion adoption theory as the framework to guide the questions and data analysis for this research.

## Methods

For this study, a qualitative approach was used to clarify the definitions and use of copying in the fashion industry. This method has been used by numerous previous fashion researchers.<sup>52,53</sup> Corbin and Strauss<sup>54</sup> reiterated that qualitative research is a correct research tool for examining a problem where limited information is written about the topic and details may be missed through statistical analysis. Such is the case for copying in product development. The lack of literature on the research topic of copying in product development as well as the desire to gather in-depth information from industry professionals, who are often busy and concerned with protecting trade secrets, further justifies the qualitative methods used for this study.

## Participants

Potential participants for the study were selected with a cross-sectional approach. Fashion industry personnel, as fit the criteria of work in fashion product development, were invited via email to participate in the online survey, including open-ended questions. This method of stratified-sampling selection of potential industry participants was used in previous fashion industry-related research.<sup>55–59</sup>

Ten participants, representing eight job titles and 10 companies within the product development segment, responded to the online survey. This response was a 50% response rate. Nonrespondents were contacted, and no common reason or bias was found for nonresponse. Reasons for nonresponse varied from being out of town, having project deadlines, or following company policy. Nonrespondents were from all segments of the fashion industry and had varying experience levels. The sample size and industry variance are similar to industry personnel in previous studies.<sup>60,61</sup>

Of the responding participants, job experience ranged from 2 years to more than 10 years, with an even distribution of participants across the number of years. Job titles, supplied by the participants, were variations of product development positions and included the more product-oriented positions of Senior Designer, Technical Designer and Product Developer, as well as inclusion of employees in areas of product marketing, business process analyst and customer-contact manager. Although the wording varied, the titles were all within the realm of product development as defined by the literature.<sup>62–65</sup> The variety of titles is indicative of the variation in the fashion industry,<sup>66</sup> and of the fashion industry’s uniqueness.<sup>67</sup> To verify the inclusion of product development personnel in the study, each participant also confirmed that he/she had direct input into the product development process for his/her company.

Product categories represented by the firms of the participants were also representative of the fashion industry: more than one-half of the participants were in women’s wear, while the remaining employees worked for companies in men’s wear, children’s wear and accessories. One participant worked for a company that covered all the major product categories. Specific product types within each of the product areas included dresses, knit tops and bottoms, pants, athletic wear. Dresses were the largest single product type as indicated by the participants; however, as indicated above, the product type was spread across the industry and represented the diversity of products found in the fashion industry.

## Questionnaire

The instrument for the study was a survey with open-ended questions based on terms used in previous product development research.<sup>68,69</sup> Questions specific to the product development process activities were drawn from previous literature.<sup>70–73</sup> Fixed response questions were used only for the product development activity designations for copying and for gathering personnel and company information. Open-ended questions were used to draw extensive responses and new insights from busy industry personnel. A pilot test was done among four nonparticipating industry personnel as well as three academics, who had product development experience in industry to refine the questionnaire. The pilot study resulted in 14 terms used to identify activities within the product development process. The terms were set in sequential order by the participants of the pilot study and are as follows: trend analysis, inspiration problem solving, design ideas, design creation, prototype development, specifications, samples, line development, line preview, pattern making, pattern grading, buyers preview, and contract production. The participants in the pilot study

could not agree on a clustering of the fourteen items but the sequential order was unanimous. This order but lack of parallel models fits with the findings of Choi et al.<sup>74</sup> that activities within product development models are not evenly divided into similar segments and flow across segments.

### Data collection and analysis

For data collection, notifications about the survey and invitations were sent to the selected industry personnel after clearance through university IRB protocol. The online survey was posted using the Qualtrics survey tool. As these personnel were working in the fashion industry in New York City, the online format allowed for an efficient and effective way of reaching these busy individuals and provided a way to capture data when face-to-face interviews were not feasible. This method for data collection has been used previously with fashion industry personnel.<sup>75</sup> With the increased use of mobile devices and internet availability, the definition for research interviews has been expanded to include not only face-to-face interviews, but also interviews conducted via phone surveys, internet-facilitated questionnaires and online surveys, which may be conducted without researcher hands-on, face-to-face assistance and guidance.<sup>76</sup> A structured protocol was used in the notification, administration and operation of the online survey, which enhanced the reliability of this data collection method. The use of a structured instrument and pre-set directions assured that each participant received the same set of directions and questions. In addition, the researcher had a research protocol that guided how the approach to each participant was made and how data was collected. Whatever the researcher said or sent, the researcher did for everyone.

In examining the data, the researcher concluded that conceptual areas were well saturated, and coverage of jobs and tasks in the fashion industry were well represented. Both components are key measures to determine appropriate participant numbers for qualitative studies within a hard-to-reach population.<sup>77</sup> Responses to the open-ended survey questions were data rich and extensive, which also contributed to the meaningfulness of the responses. The online fluency of these participants enhanced rather than diminished the volume of information acquired by the researcher and was in keeping with new methods of data collection using available technology, especially for hard-to-reach or otherwise unavailable participants.<sup>78</sup> Many of the participants followed their survey responses with email responses directly to the researchers or one of the researcher's Facebook page. These participants had more to say than room in the survey allowed or later reflected on their answers and wanted to add to their responses.

Using recommendations by Corbin and Strauss<sup>79</sup> for qualitative data analysis and a coding system developed from the product development literature, a thematic content analysis was done to deconceptualize and reconceptualize data. A similar technique was used by Wu et al.<sup>80</sup> in the analysis of data collected from fashion industry personnel. Following Creswell's explanation of qualitative analysis,<sup>81</sup> the researchers reduced the data and reassembled it in meaningful units. This was a beneficial way to analyze the data so that the content of the data informs the research questions as new findings emerge. Content analysis through the multiple-step process is an accepted qualitative research method of both organizing and analyzing the data. Using content analysis and triangulation methods enhanced the validity of the study. To enhance reliability, or the consistency, of the data analysis several qualitative techniques were used including analysis from a community of experts. These experts with knowledge of product development and other aspects of the fashion industry were peer checkers, who reviewed, and agreed or disagreed with the results

or research findings. Consensus, through the experts, was used when disagreements of findings were noted.

## Findings and discussion

With improved technology, copying can be a quick and easy to use tool within the fashion product development process. With a click of a button, a photo is taken, or a scan is made, that allows for copying images from the web, a store window or the street. The importance and frequency of copying within fashion product development is reflected in these findings gathered from a representative group of product development employees within the fashion industry.

### Industry definitions

The first section of survey questions addressed the first research purpose and was related to the need for fashion industry definitions of copying, knockoffs, and counterfeiting. Participants were asked to define copying, knockoffs, and counterfeiting. To clarify the definition and to provide a validity measure, participants were also asked to describe the process of copying, knocking-off and counterfeiting.

**Copying:** In the findings, a high degree of similarity was observed in participants' definitions of copying. In general, most recognized copying is using existing products to create new products. More specifically, the participants' answers were clustered into the following four categories:

- a) Use of design elements from a trend
- b) Using the product for style research
- c) Using a product or style feature from a product
- d) Duplicating a product.

With reference to the fashion product development process, copying ranged from gaining inspiration for a new look to the copying of exact details of a product.

The definitions of copying in Categories (a) and (b) fell within either the trend analysis phase or the research and ideation phase of the product development process.<sup>82-84</sup> For example, two participants said copying was shopping the market for trends. One participant referred to using design elements from another style that fit the trends identified. Another noted that "emulating one style or design feature can be part of trend analysis."

Categories (c) and (d) answers centered around the use of existing apparel items—either garment details or the entire garment. In Category (c) definitions, several participants said that they shopped the markets looking for style features or product details (e.g., pocket, zipper application, collar). Another participant explained that clients would "bring attributes from existing garments" and ask that they be combined. In Category (d), copying was defined, by the participants, as duplicating the entire garment, sometimes using the rub-off method defined by Kincade and Gibson.<sup>85</sup> This definition of copying was the most common with 60% of the participants describing copying as acquiring a garment and taking it apart to create a sample pattern. This type of copying also included examining fabric, stitches and seams. About 50% of the participants indicated they began their copy work by taking a photograph of a garment. With the photograph, the participants could acquire and retain information about style, color, print, and artwork without the cost of purchasing the garment. In addition to buying or photographing the garment for the corporate office, participants said that they often sent either or both garments and photographs to factories to copy styles created by others.



Variations representing the extremes in copying practices were validated when a participant said copying was “copying the idea and concept” in contrast to the participant who said copying was using the product or trend “without changing anything.” Additional comments from participants further supported the idea that at least four categories or degrees of copying existed. The participants were approximately divided about how much of the garment was duplicated before the process was considered copying. Some thought that replicating a single style feature, such as one pocket, was not copying while others thought that combining style elements from multiple garments was copying. The style feature’s distinctiveness was also considered by some as the division between being a copy and/or being similar.

**Knockoff definitions:** When asked about a definition of knockoffs, the participants were less verbal than when asked about copying, but they unanimously agreed that knockoffs were similar in style to something already produced but the price point of the copy was lower. This definition of the knockoff can be summarized by the response from a participant: “The *gist* of the style is the same in the new product but is a less expensive version.” Other aspects of knocking-off involved working with mass retailers to create the desired style at the lower price, with similar, but not the same logos. This definition and the concern about cost is similar to one of the definitions delineated by Berman<sup>86</sup> that involved copying with considerations for lowering the price. The participants also confirmed the definitions in previous textbooks about knockoffs.<sup>87,88</sup> One participant added that knocking-off was “less severe than copying.”

Using existing garments by buying or seeing the original was reported as key to making a knockoff by 60% of the participants. They said that the idea could come from apparel as well as images on cards or other print media. As with copying, sometimes knockoffs only involved part of the product and not the total garment in order to achieve the desired look or style. Delivering something that the consumer wanted was important in making a knockoff as well as a copy. This is in keeping with the product development focus on consumer input and being customer centric.<sup>89-91</sup>

**Counterfeiting definitions:** When asked to define counterfeiting of existing products to create new products, most participant responses were more narrowly focused than when responding to the questions on copies or knockoffs. The majority of participants noted that the process of counterfeiting was an unauthorized or illegal copy of a product and often included copying labels or logos. (Note: two participants stated that they knew nothing about counterfeiting). A theme in the definitions by the participants was that counterfeiting was often perpetrated on products of known brands. Fake and unauthorized were terms cited by the participants. These responses are similar to the textbook type definitions of counterfeiting.<sup>92,93</sup>

Several participants had strong, negative perceptions about counterfeiting, including “made in sweatshops,” “sold on the street,” and “had lesser quality and less durability.” One participant stated that profits “can go towards terrorism and drug use.” These comments add depth to previous findings on counterfeiting of a range of consumer products, including fashion goods.<sup>94,95</sup>

### Reasons for copying

Participants’ key reasons for copying products were two-fold: (a) following trends (70%) and (b) reducing time in getting products to market (60%). The term, following trends, was further explained, as most participants indicated they obtained products from outside of their own product lines to be included in their new product lines. Trend analysis is listed in many of the product development models for doing business in the fashion industry.<sup>96-99</sup>

The speed of development of new products to market is frequently important in the fashion industry. Based on participants’ responses, copying was an important tool in reducing time in the product development phase of the fashion cycle. Also, in reducing time in product development, participants said they used copying because they used customer (i.e., retailers) feedback on best sellers and/or used a trend service. Lack of design personnel was also a factor in the use of copying for more than 30% of the participants. Another 30% of the participants indicated copying also provided cost control, an important factor since getting the right product to market at the right time may make or literally break a company.<sup>100</sup>

Although most of the participants referred to copying of outside products, one participant indicated that the “core brand image for my company” was a reason for copying. To maintain a brand image or to promote continued sale of a best-selling style, the participant mentioned copying of previous or current products from the participant’s own company. Companies with distinctive style features or images often repeat elements of these style features in new products within their product line to maintain the products’ appeal to their core customers. In the fashion industry, copying style features of a basic body, already in the company product line, plus changing or adding features for newness, a technique described by Wickett et al.,<sup>101</sup> is a different process from the new product processes explained by May-Plumlee and Little.<sup>102</sup> Thus, responses from questionnaire participants indicate that copying could be both a process of external copying and a process of internal copying.

### Position of copying within the product development process

In analyzing participants’ responses to the question on reasons for copying, the researchers concluded that copying seemed to be inherent in the product development process of these participants. Copying as an integral part of the fashion industry is further cemented as participants concluded that “there is nothing new” and “everyone copies.” According to the participants, copying was used throughout the product development process. Previous product development models based on fashion industry information did not specifically include copying as an activity in product development,<sup>103-106</sup> but using the fashion adoption theory in conjunction with product development terms, trend analysis or research and idea generation seemed to be the most probable locations of copying activities. This assumption based on the study’s framework was supported. Copying was found often in the early activities of product development where research is done, and ideas were generated. Copying was used by participants (47%) as part of trend analysis and inspiration. This finding is cross-supported in participant responses about reasons for copying in which they reported some variation of the wording, “the customer brought this to me.” One Participant stated that “clients bring a number of attributes that they like from different products and ask for them to be combined.” In other words, customer input was a form of trend analysis and/or inspiration during product development.

Based on previous literature, the expectation was proposed that the initial stages of trend analysis and inspiration would be the only place where copying was used. In contrast, the participants indicated that copying was spread across product development activities, somewhat evenly spaced throughout the process, except the final production stage. All participants said they used some form of copying in design creation and in sample development. These activities are in the mid-stages of product development models in segments described as preparation for production.<sup>107-109</sup> In later stages of product development, copying was reported during the more technical activities of pattern

making (70%), both sample and production patterns. Participants also said that copying happened during line preview (40%) and buyers preview (40%), when inside customers (i.e., sales and marketing) and external customers (i.e., buyers from retail customers) wanted modifications to the samples that they saw based on ideas or products they had previously seen, either in the company's product line or in other company's product lines. Instead of copying being a small and narrowly focused activity in fashion product development, an assumption based on the lack of discussion within previous product development literature, copying was found to be threaded throughout the entire product development process, as noted by the participants.

### Measures to control counterfeiting

With the ease of copying using new technologies<sup>110</sup> and the rising rate of counterfeiting in the fashion industry,<sup>111</sup> the last research area was to examine the proactive measures apparel manufacturers had in place to monitor counterfeiting. In contrast to the expanding nature of counterfeiting and the potential ramifications of illegal copying in the fashion industry, 60% of the participants said that their company provided no training to employees about copying, knocking-off or counterfeiting. Several participants indicated that they needed to know more about the legal issues of copying and when copying became counterfeiting so that they had better direction on what to copy and what not to copy when making product development decisions. Other participants said, "we have a once-a-year presentation made," and others said our company sends out informational emails and/or holds training sessions concerning counterfeiting. Multiple participants said their companies had an in-house legal team that reviewed product lines and/or tech packs. One participant said, "lace patterns," "jeans back pockets," and "artwork" especially were reviewed.

In contrast, companies as reported by participants were proactive in checking on what others may copy from them. Participants (80%) noted that their companies spent time and resources on monitoring what other companies did relative to their products. This monitoring included "comparison shopping," "monitoring Facebook," "evaluating products on re-sale sites such as eBay," "rewarding customers for reporting," and "search[ing] the internet with key words that would bring up products similar to ours." For some participants, monitoring copying and counterfeiting was part of product development (70%) and for other participants (20%) these activities were completed in a separate department. Although a few participants had limited to no knowledge about copying, knocking off, or counterfeiting, the depth of responses from most participants indicated that some degree of copying, from trend analysis to pattern tracing, was used in the development of their fashion products.

### Conclusion, implications and suggestions for future research

In general, copying was defined as taking existing products to create new products; however, participants also used phrases such as copying "without changing anything" to "copying the idea and concept" when describing their activities. The broad definition of copying included four separate categories from ideation and analysis to photographic replication. Their responses exemplified the breadth and span of the definition for copying as used in the fashion industry. Most of the participants said that copying is inherent in the fashion industry, and few participants reported doing any completely original work in product development. One participant even stated that there is "nothing new." All participants employed variations of copying throughout their product development work. Copying part or all of a garment was common practice among the participants and in their

companies' product development processes. These findings confirm through industry practice that fashion is created through copying, which mirrors the fashion adoption theory known to be among consumers.<sup>112</sup>

Knock-offs were categorized as copying but, participants noted that knocking-off was with an intent to have a similar item at a lower cost. The emphasis on knock-offs was on obtaining a product at a lower price point than the original, usually through the use of cheaper raw materials for the knockoff. Counterfeiting, although noted by the literature as a form of copying,<sup>113</sup> was clearly differentiated by the participants from the routine copying that they did through product development by the attempt through counterfeiting to defraud the consumer through the use of fake logos and branding information. The participants seemed to have limited information about counterfeiting and many of them saw monitoring counterfeiting within their company or of their own products to be the responsibility of legal teams or others outside of product development. Only a few participants, especially one in a small company, saw the direct impact of counterfeiting on their product development work.

The reasons for copying were clearly stated in the need for following trends and the time and money saving practices that were required by and practiced in many fashion companies. These reasons were further exemplified as participants noted the need to respond to retail customers who brought products to their meetings for the participants to review. In addition, copying was from products acquired through both internal and external sources. Copying of one's own products was often done with the purpose of maintaining a brand image as required by marketing areas of the company. When examining the copying process and its position within the product development process, copying was noted by participants as being throughout the product development process, from the early phase for ideas and inspiration through product development, and in the later and more concrete work of sample and production pattern making preparing the product for production.

Beyond the acknowledgement of copying throughout the product development process, the implications for the fashion industry about copying are two-fold: the importance of being aware of potential legal issues and the importance of educating and training employees relative to when copying is needed and how much copying is legal. If other companies in the industry are similar to the companies for which these participants work, employees are receiving limited to no information about the legal issues of copying. Sharing information is needed about due diligence, and the importance of product developers and legal representatives having an on-going working relationship.

Findings provide implications for teaching and curriculum review. Faculty can use these findings to become more aware of the prevalence of copying within the industry and to include discussions of techniques that are used, especially in pattern making, and to increase their awareness of copying as a tool in industry trend analysis. Future researchers could use the definitions and process activities as part of future research on product development. Future research is also needed to engage a larger participant pool and perhaps additional product areas or job descriptions to verify results. With technology making copying easier and more accurate, further research is suggested to examine issues of the legality of copying in specific tasks within product development and to examine the implications of these findings for educational direction and industry training.

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## Conflicts of interest

Authors declare that there is no conflict of interest.

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